Chapter 1: Introduction

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A Comparative Grammar of the Early Germanic Languages
R.D. Fulk
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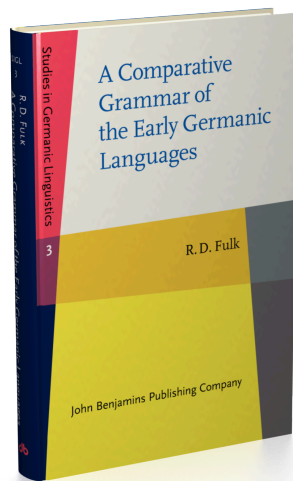
Introduction

1.1   Early Germanic phonology and morphology: general bibliography

Handbooks of early Gmc. in general, with varying attention to the reconstruction of PGmc., include Ramat 1981, van Coetsem & Kufner 1972, Krahe & Meid 1969 (succeeding Loewe 1933), Guchmann *et al*. 1962–6, Prokosch 1939, Hirt 1931–4, Boer 1924, Kluge 1913, Paul 1900–9, Dieter 1900, and Streitberg 1896. Euler 2013 is devoted to the WGmc. protolanguage and its development into the attested older languages. Ringe 2017, not a grammar but a narrative, traces developments from PIE to PGmc.; likewise Ringe & Taylor 2014 from PGmc. to OE, both with copious lists illustrating sound changes. More theoretical is Voyles 1992. Hutterer 1975 may be useful for general external history. Of these, Paul 1900–9 and Hirt 1931–4 are notable for attempting to provide extensive bibliographical coverage of individual topics.

    Specifically devoted to PGmc. phonology is Noreen 1894. For an excellent guide to derivational morphology, see Krahe & Meid 1969: III, and on both inflectional and derivational morphology, see Bammesberger 1986a (verbs) and 1990 (nominals). The derivational morphology of Gmc. nominals is also covered thoroughly in Kluge 1926, and specifically for Gothic in Casaretto 2004. For bibliography on Gmc. morphology, consult Seymour 1968. For the Gmc. lexicon, some useful sources are Kroonen 2013a, Orel 2003, and Torp & Falk 1909. On PGmc. syntax, see Walkden 2014, Hopper 1975, Lehmann 1972.

    A very substantial bibliography will be found in Markey, Kyes, & Roberge 1977. The most thorough bibliographical source covering the period from 1948 to the present is the annual *Linguistic bibliography for the year…*, with supplement for the years 1939–47.

    See further §§1.11–20 for general bibliography on the individual languages.

1.2   The Indo-European background of Germanic

The Germanic languages are a subgroup of the Indo-European family of languages.[1] It is a well-defined subgroup, showing a number of distinctive traits that differentiate it from other IE languages, such as the results of Grimm's law (§6.4), the development of a distinction between the strong and weak inflection of adjectives (§9.7), and the rise of verb preterites marked by a dental suffix (§12.32).[2] In conceptualizing the relation between Germanic and other IE languages, the comparative method whereby Proto-Indo-

European has been reconstructed very nearly demands a genealogical model like a family tree, with each language or language group represented by a node on a branching diagram. Such a representation as a branching tree, or *Stammbaum*, was first proposed by Schleicher (1860: 81), as shown in Figure 1. In such a model, the protolanguage is assumed to have developed dialects which eventually diverged sufficiently to be regarded as separate languages, which in turn underwent the same process repeatedly. An assumption underlying such a *Stammbaum* is thus that once languages diverge in this manner, each develops separately, without the influence of one upon another. It has frequently been pointed out that this is not a realistic model of language development, for a variety of reasons, the most obvious of which is that languages do not generally develop in isolation, but changes may affect more than one language at once, proceeding diatopically in a wave-like pattern (as described in the so-called *Wellentheorie* 'wave theory', first posited by J. Schmidt 1872).[3] An example of this is umlaut, which affected West Germanic after the rise of recognizably different West Germanic languages, perhaps affecting Old English first (§4.7). Changes may also affect different languages in identical ways, often because related languages contain identical structures that are ripe for particular kinds of alterations (in the 'drift' model first proposed by Sapir 1921: 160–82). Tree diagrams do encode

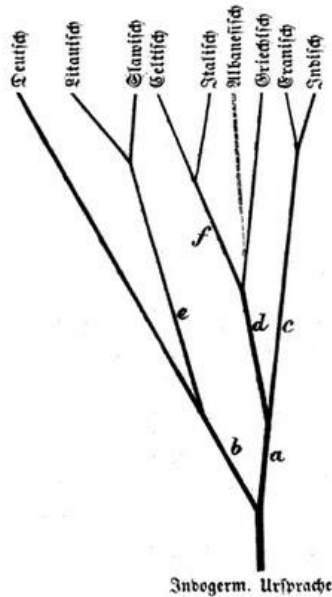*Fig. 1. The Indo-European* Stammbaum *of Schleicher (1860: 81). Here PIE lies at the base of the tree, and the uppermost branches represent the living IE language families known to Schleicher (Germanic, Baltic, Slavic, Celtic, Italic, Albanian, Hellenic, Iranian, Indic). The letter* a *marks a branch labeled Asiatic-South European,* b *North European,* c *Asiatic,* d *South European,* e *Balto-Slavic,* f *Italo-Celtic.*

useful information in a convenient, memorable form. For example, Schleicher's tree reveals at a glance that there are greater similarities between the Baltic and the Slavic languages than are detectable between these and any other language group. But trees also by their nature make specific claims about issues that may in fact be controversial, such as the robustness of the affinity between Italic and Celtic, and the precise relation of Albanian to the other IE languages. The proper position of Germanic within such a tree is particularly difficult to determine.[4] When the wave theory and the *Stammbaum* theory are viewed properly, however, i.e. as necessarily inadequate models of language development, the two are not fundamentally incompatible: "the former is a model of how sound-changes can spread; the other a model of the general results of successive sound-changes" (Hines 1995: 35–6).[5]

The *Stammbaum* model (or 'cladistic model' in some recent treatments) also appears to proceed from the premise that any protolanguage was at first uniform in nature, whereas the study of modern languages shows that protolanguages are likely from the start to have had dialects, perhaps both regional and social. Moreover, some such dialects might be difficult to classify as belonging to just one of two languages with which it shares features. These observations have some relevance to the much-disputed question of when and where Proto-Indo-European was spoken.[6] A particular complication is that the Anatolian languages are so markedly different from the other Indo-European languages that on any branching tree their divergence should be placed well before the differentiation of the remaining languages, and so the problem of identifying the date and place of IE origins depends on how the relation of Anatolian is to be recognized.

Although there is no scholarly consensus about these issues, the predominant view now is that the IE languages originated in the steppeland of Ukraine and southern Russia, in the so-called Pontic area north of the Black and Caspian Seas, in the second half of the fourth millennium BCE.[7] Although many parts of Europe and Asia are compatible with the place of origin suggested by the reconstructible PIE vocabulary of flora and fauna, what is known of PIE burial practices and wheeled vehicles is especially associable with steppeland cultures of that period known as 'kurgan peoples' for their use of funerary tumuli known as 'kurgans', a term based on the Russian word for such.

The chief competing hypothesis today is that of Renfrew (1987, along with Gamkrelidze & Ivanov 1995), who would place the IE homeland in Anatolia and the Caucasus in the seventh millennium BCE, as part of an argument that it was agriculture rather than warfare that made the Indo-Europeans so successful. This hypothesis is not as widely credited by archaeologists and linguists.[8] The linguistic objection has often been raised that it is difficult to reconcile with lexical evidence such as the shared IE vocabulary of wheeled vehicles. Such vehicles seem first to have been used in the second half of the fourth millennium, supporting the steppeland hypothesis, though Renfrew (e.g., 2002: 8–9) has responded that after the differentiation of the IE language branches they could all have borrowed the relevant terms along with the technology. It has been argued, moreover, that Renfrew's alternative, earlier dating can be associated with the period during which Anatolian developed as a discrete branch (Gray & Atkinson 2003, Atkinson *et al*. 2005).[9]

On the distinction between *centum*- and *satem*-languages, see §6.1.

1.   After a dearth of long standing, recent years have seen the appearance of a number of introductory works in English for the study of Indo-European. For an excellent grammatical introduction to PIE, consult Szemerényi 1996; also Lehmann 1993, Meier-Brügger 2003 (with especially useful references to relevant literature), Clackson 2007, Adrados *et al*. 2010, and Beekes 2011. For introductions to the IE languages and PIE culture, see Baldi 1983, Ramat & Ramat 1998, Mallory & Adams 2006, Voyles & Barrack 2009, and Fortson 2010. The most detailed grammars of PIE are in German: see Kuryłowicz et al. 1968–2015, and the dated but still useful Brugmann & Delbrück 1897–1916. Still useful also is Krahe 1966–9. For a survey of the IE languages, see Kausen 2012. For lexicon, see Pokorny 1959–69, and, specifically for verbs, Rix 2001; for nomina, Wodtko *et al*. 2008.

2.   For succinct accounts of major distinguishing features of the Germanic subgroup, see H.F. Nielsen 1989: 28–32, Polomé 1997, Fulk 2008. Krahe & Meid (1969: I, 43–4) list eleven distinctive features of Germanic: 1. fixing of the accent on initial syllables, 2. Grimm's law, 3. development of syllabic resonants to /u/ plus resonant, 4. coalescence of *a* and *o* as *a*, and of *ā* and *ō* as *ō*, 5. loss of final consonants and vowels under the *Auslautgesetze* 'laws of finals', 6. systematization of ablaut, 7. case syncretism in nouns and pronouns, 8. rise of the *n*-stem nouns, 9. rise of the opposition between strong and weak adjectives, 10. simplification of the verb system, 11. rise of weak preterites. See also Wiik 1997, and see further §1.3 *infra*.

3.   A third approach, the *Entfaltungstheorie* 'developmental theory' of Höfler (1955–56, supported by, e.g., Penzl 1988a, 1988b), calls for more carefully calibrated reconstruction within the framework of the *Stammbaumtheorie* and posits nondistinctive features in the protolanguage developing in divergent fashion in the daughter languages (hence their *Entfaltung*).

4.   See especially Ringe, Warnow, & Taylor 2002, and cf. Gray & Atkinson 2003, with discussion in Clackson 2007: 10–15.

5.   Seebold 1986: 173–5 defends the primacy of the *Stammbaum* model over models of linguistic convergence.

6.   For a wide-ranging discussion of the scholarship on the date and place of IE origins, see Mallory 1989. More concise, with more recent information, is Fortson 2010: §§2.50–73.

7.   This hypothesis depends vitally on the findings of the Lithuanian archaeologist Marija Gimbutas: see especially Gimbutas 1997. For wide-ranging discussion of the lexical evidence, see Mallory & Adams 1997, and of the archaeological evidence, Anthony 2007.

8.   One important archaeological critique of Renfrew's argument is that of Gimbutas (1997: 338–44). For an enlightening overview of various theories about the original home and early movements of the Indo-Europeans, see Polomé 1993.

9.   Current debate deals with the question whether certain modern IE languages (including English) should be derived from known earlier states of those languages, as recorded in preserved written form, or from forms of those languages assumed to have differed from the formalized, presumably more artificial written records; the former position supports the steppeland hypothesis (see, e.g., Chang *et al*. 2015, responding, in part, to Bouckaert *et al.* 2012), the latter the Anatolian hypothesis (see Wade 2015). Whether or not there was any Anatolian migration into Europe in the seventh millenium BCE (for reasons to doubt, see Fortson 2010: §2.71), genetic evidence supports the migration of steppeland peoples into what is now Germany in the third millennium BCE: see Haak *et al*. 2015, Novembre 2015.

1.3   Distinguishing characteristics of Germanic

Hirt (1931–4: §20) lists nineteen characteristics of the Gmc. language family that distinguish it from other IE language groups. The following is based loosely on his list (see also §1.2 n. 2.):

(1)   Change of the PIE pitch accent to a stress accent and shift of place to a fixed position in the word (§2.2 *infra*).

(2)   Shift of consonant values governed by Grimm's law (§6.4).

(3)   The rise of geminate consonants (§6.8).

(4)   Neutralization of the contrast between PIE *o* and *a*, as well as stressed $\underset{\circ}{H}$ (§3.2).

(5)   The realization of PIE syllabic sonorant consonants as *u* + sonorant (§3.2).
(6)   Systematization of ablaut, e.g. final severance of any connection between ablaut alternations and accent, and the use of ablaut to distinguish verb tenses (§3.6).
(7)   Changes to final syllables under the 'laws of finals' (§§5.1–6).
(8)   Fusion of stem formatives with inflections, with the attendant transference of grammatical information to the inflection, e.g. gender in nouns (§7.1).
(9)   Reduction of the eight or nine nominal cases of PIE to four or five (§7.3).
(10)   Extensive changes to the pronominal system, especially as the result of analogy (§§8.2–15).
(11)   Increased productivity of the class of *n*-stems and the rise of weak adjectives (§§7.29, 9.7).
(12)   Innovations in the inflection of strong adjectives, distinguishing their declension from that of nouns (§9.2).
(13)   Unproductivity of PIE patterns of stem formation in the present tense of verbs (§12.9).
(14)   Loss of the *s*-aorist and the imperfect (§12.9).
(15)   Conversion of the PIE perfect to the Gmc. preterite (§12.9).
(16)   Merger of the aorist with the perfect in the formation of the Gmc. preterite (possibly: §12.25).
(17)   Loss of various non-finite verb formations, and especially the rise of a uniform infinitive formation (§12.30).
(18)   Loss of perfect and middle participles.
(19)   Influence of unstressed vowels upon stressed (§§4.3–4), though most such changes postdate the PGmc. period.

To this list may be added some others, including the following:

(20)   The rise of new preterite formations in weak and preterite-present verbs (§§12.32–3).
(21)   Reduction of the verb moods of PIE to three, with the etymological optative assuming the functions of the subjunctive (§12.9).
(22)   An increasing tendency toward unproductivity in nominal classes other than the PIE *o*-, *ā*-, and *n*-stems (§7.1).
(23)   Unproductivity in strong verbs, with later narrowing of productivity chiefly to the second weak class (§§12.12, 12.32).

1.4   The position of Germanic within the Indo-European family

Unlike Schleicher's *Stammbaum* (§1.2), modern reconstructions commonly represent the main branches of the IE family tree as proceeding directly from PIE, as if PIE broke all at once into so many different varieties. The Indo-Iranian and Balto-Slavic branches are the exceptions, each representing a period of common development before the two constituent language groups of each went their separate ways. The histories of the IE daughter languages in the various branches themselves suggest that this is not a plausible

view of the rise of the daughter languages, since their *Stammbäume* show many inter-mediate branchings, and such should therefore be expected between PIE itself and the rise of the major language families within it. Yet in most cases it is exceedingly difficult to specify with assurance particular affinities between IE branches, and this is especially true in connection with Germanic. Such similarities as are discoverable between Ger-manic and any other particular IE branch are not generally impressive and may not be common inheritances from the mother language but the result of later contact between neighboring peoples or of substrate influence (§§1.4–5) or, in some cases, of convergent but independent developments.[1]

Nonetheless, it is commonly assumed that the earliest Germanic formed part of a northern European IE linguistic continuum that produced the Celtic, Italic, and Germanic, and perhaps the Balto-Slavic, language groups.[2] This continuum is sometimes referred to as 'Northwest Indo-European', in consequence of the research of Meillet (1908: 23) into the *vocabulaire du nord-ouest*. Celtic, Italic, and Germanic are generally agreed to belong to this grouping; there is much greater disagreement about whether Baltic and Slavic should be included in the group (see Euler 1997: 103–4 for references).[3]

Among the languages of Europe, some especially close parallels to distinctive features of Germanic are to be found in Balto-Slavic.[4] The most striking of these is the use of -*m*- in the dative (instrumental) plural of nouns where *-*bh*- is reflected in other IE branches (§§7.2, 7.8 n.17). Other shared features include trimoric vowels of disputed origin in certain inflections, such as the nom. sg. of masc. and neut. *n*-stems (see Jasanoff 2002: 37–8), the neutralization of the PIE *a/o* distinction (though in opposite directions), present participles in *-*nt-jo*- (in West Germanic), inchoative verbal suffix -*n*-, and adjectives in *-*isk*- (e.g. Go. *gudisks* 'divine', Lith. *dañgiškas* 'heavenly', OCS *slověnьskъ* 'Slavic'). Lexical commonalities have been studied in detail (see, e.g., Porzig 1954: 139–47, Stang 1972, Mańczak 1985b), and although the project of discerning affinities on the basis of shared vocabulary is fraught with difficulties, it does seem likely that many lexical connections between Germanic and Balto-Slavic are quite ancient.[5] Euler (1997: 110–11, with references) summarizes specifically Baltic morphological parallels, such as comparatives containing *-*is*-, as in Go. *mins* 'less', OPruss. *massais* 'fewer' (see especially Schmid 1989, with further references), and parallels in the formation of the dual pronouns, e.g. Lith. (Samogitian) *vè-du*, Go. *wit* 'we two'. Among the numerals, OE *forma* 'first' is parallel to OPruss. *pirmas* 'first', both with a distinctive -*m*- suffix; and there are similarities between the Germanic and Baltic numerals '11' and '12'; but on the problems associated with the connection, see Bednarczuk 1999: 44. Schmid (1986: 164–5) points out how ablaut patterns in Baltic verbs parallel those in most Gmc. strong verb classes, extending even to the lengthened grade in the preterite of the fourth and fifth classes: to Go. *niman* 'take', pret. pl. *nēmum*, cf. Lith. *lemia* 'break', pret. *lėmė*, and to Go. *bidjan* 'request', pret. 3 pl. *bēdun*, cf. Lith. *slepia* 'conceal', pret. *slėpė*. He also notes the twofold adjective inflection of Germanic and Balto-Slavic and parallels in regard to the influence of pronominal inflection on adjective formation.[6]

The question of ties between Germanic, on the one hand, and Italic and Celtic, on the other, is not entirely separable from the fraught question of the relations between the latter two, but it is now generally agreed that the sharing of features is due to language contact beginning ca. 1500 BCE, though a few features could stem from an earlier period

of unity among Germanic, Italic, and Celtic, such as conversion of the PIE pitch accent to a stress accent, use of the suffix *-tūt- (as in Lat. *juven-tūt-* 'youth', OIr. *betha* 'life', gen. *bethad* < *$g^w i\underline{u}o$-tūt-, Go. *ajukdūþs* 'eternity'), and the development of *-tt- to *-ts- > -ss-, e.g. in Lat. *vīsus* 'seen', cf. OIr. *fiuss* 'knowledge' and OHG *gi-wissi* 'certain' (but cf. K.H. Schmidt 1986: 233).[7] It is also largely consensus that ethnic Italic speakers migrated from northern Europe, and from that point in time lexical borrowings between the Germanic and Celtic branches (the former usually borrowing from the latter) become prominent, perhaps because the Germanic and Celtic groups had earlier been separated by the Italic.[8] Thus, Italo-Germanic contact stems from the Bronze Age (cf. Lat. *aes*, Go. *aiz* 'copper, bronze', from *$aios$, also shared with Indo-Iranian with the meaning 'iron'), whereas Celto-Germanic contact stems from the Iron Age (cf. Gaulish *īsarno-*, Go. *eisarn*, etc., shared with no other IE branch). A considerable number of fairly basic lexical items are shared between Italic and Germanic.[9] One exclusively Italo-Germanic isogloss is the use of *-no- to form distributive numerals from adverbs, e.g. Lat. *bīnī* 'twofold' < *$d\underline{u}is$-noi; cf. *bis* 'twice'), OIcel. *tvennr* < *twiz-naz. Another is the use of the suffix *-nē to indicate direction from, as in Lat. *superne* 'from above', Go. *ūtana* 'from without' (Krahe 1954: 72). Cf. also the use of the directional suffix *-tr- in Lat. *extrā* 'outside', Go. *huaþrō* 'whence', etc., and the existence of *īn*-stems beside *ōn*-stems, e.g. in Umbrian *natine* (Lat. *natiōne*, reformed analogically) and Go. *managei* 'multitude'. There are also striking parallels between Latin and Germanic in connection with the Gmc. weak classes of verbs, e.g., in the third class, Go. *þahan* 'be silent', *ana-silan* 'be silent', to which cf. Lat. *tacēre*, *silēre* (see Szemerényi 1996: §9.4.1.5). Also notable is the parallel between Gmc. preterites with a long vowel in the fourth and fifth strong classes and Lat. perfects, e.g. Go. *sētum*, Lat. *sēdimus* 'we sat', though there are parallels also in Baltic (Euler 1997: 106).[10] Scholarship on Celto-Germanic isoglosses is summarized by K.H. Schmidt (1984; 1991: 139–47), focusing on shared vocabulary, which he divides into five strata, the earliest of which includes the administrative terms Go. *reiks* 'ruler' (borrowed before the application of Grimm's law from Celtic *rīg-* < PIE *$rē\hat{g}$-) and OE *ombeht* 'attendant' (cf. Gaulish *ambactus* in Caesar, with *amb-* from PIE *h_2mbhi-), shown by their form to have undergone Celtic phonological developments before being borrowed into Germanic.[11] The initial stress of Germanic has also been postulated as a feature derived from close contact with Celtic (Polomé 1992b: 58–9). See further Polomé 1983, Untermann 1989.

Germanic bears, as well, some affinities to Illyrian and Venetic, two European IE languages attested only fragmentarily. For example, in Germanic and Illyrian, possessive pronouns are formed with a suffix *-no-, as in OHG *mīn, dīn, sīn* (see §8.5 on the origin of the Gmc. forms), and to Venetic acc. sg. *meχo* 'me' cf. Go. *mik*, both formed by analogy to the corresponding nominative pronoun (H.F. Nielsen 1989: 25). On Germanic and Hellenic, see Polomé 1986b.

Although the standard view is that Germanic vastly simplified the IE verb system that it inherited, it has sometimes been argued that the relative simplicity of the Gmc. system, with a simple contrast between present and preterite (i.e., without a trace of the future or the imperfect, or, in the view of some, e.g. Hiersche 1984: 96 and Polomé 1993: 47, of the aorist, though cf., e.g., Bammesberger 1988a) and no subjunctive mood (since the Gmc. subjunctive reflects the PIE optative), is a sign of the archaic nature of

Germanic, aligning it with Anatolian, which has a similarly unelaborated verb system. The assumption thus is that IE features like the imperfect and the subjunctive developed in PIE after the Anatolian and Germanic branches had broken away, at an early date.[12] The degree of credence lent this hypothesis by scholars usually depends upon the degree of credence lent the glottalic theory of PIE consonantism (§6.2), according to which Germanic is supposed to point to a more archaic inventory of PIE obstruents than nearly all other IE subgoups. K.H. Schmidt (1991: 136) objects to this analysis, observing that the Gmc. preterite, unlike the Anatolian, is based on the PIE perfect, and perhaps the aorist, and that Anatolian attests to a morphological aspectual system that the evidence of Vedic shows to be ancient (a view strongly contradicted by Ringe 1998).

1. K.H. Schmidt (1991: 129–39) offers a convenient summary of views on the genesis of Germanic and the Germanic peoples, with references; see also H.F. Nielsen 1989: 18–28, Euler & Badenheuer 2009: 16–53. For references to studies of the relations among Italic, Celtic, Germanic, Baltic, and Slavic, see Euler 1997: 103. For an elementary survey of Gmc. relations, see Ernst & Fischer 2001: 60–108. Several of the chapters in Askedal & Nielsen 2015 are relevant.

2. See, e.g., Krahe 1954, Porzig 1954, Polomé 1985, 1993, Schmid 1986, Euler 1997, and Oettinger 1997. Although in our present state of knowledge the geographic homeland of the Germanic peoples in prehistory is only marginally relevant to the early history of Germanic, and it cannot be determined with any certainty on an archaeological basis, it is commonly assumed to have lain along the southern coasts of the North Sea and the Baltic, roughly between the Rhine and the Vistula, including the Cimbric peninsula, and probably also in southern Scandinavia (though some see the Germanic presence in Scandinavia as a later development, e.g. von Petrikovits 1985, Udolph 1994: 925–6, Elert 1997). The archaeological evidence was until relatively recently believed to suggest association with the more circumscribed Jastorf culture, located between the Weser and the Oder ca. 600–300 BCE, and probably also the neighboring Harpstedt culture to the west between the Weser and the Rhine, with considerable expansion to the east and south by ca. 100 BCE (Mallory 1989: 86–7); but now the association is generally considered less secure (see the refs. in H.F. Nielsen 2000: 362 n. 3). For informative discussion of these and other views, and especially in response to the theory of polygenesis proposed by Ament 1986, see K.H. Schmidt 1991, Polomé 1992b, H.F. Nielsen 2000: 299–368, esp. 299–303.

3. Not to be confused with Northwest Indo-European is the concept of Old European, a linguistic continuum posited for much of ancient Europe on the basis of shared lexical and morphological elements in the hydronymy across much of the continent: see Krahe 1954, Schmid 1986, 1987, Udolph 1994. On the critical reaction to such argumentation, see H.F. Nielsen 2000: 302–3.

4. On the history of scholarship relating to Balto-Slavic and Germanic connections, see Lötzsch 1987.

5. Stang 1972 attempts to show that some of the earliest lexical items shared by Germanic and Balto-Slavic antedate the use of metals. The foundational work on connections between Germanic and Balto-Slavic is Leskien 1876. For a succinct discussion, with examples, see Euler 1997: 112–14. Although Schmid (1986) argues, in part on the basis of similarities in ablaut patterns, that Germanic and Baltic (but not Slavic) share a common path of development, K.H. Schmidt (1991: 138–9) counters that the commonalities are due to later language contact. Much other work on lexical relations between Germanic and Balto-Slavic is unpersuasive. See further Bednarczuk 1982–3, Birnbaum 1984, Dyen 1990, Mańczak 1985b, 1986b (but cf. Polomé 1982a: 734–5), Rot 1988, Schmalstieg 1994.

6. In addition, Polomé (1997: 200) mentions "inflectional similarities in the causatives" and "the *j*-adjectives."

7. To the contrary, Euler (1997) argues that the connections between Germanic and Italic are no less important than those between Germanic and Baltic, and those between Germanic and Slavic are considerably less salient. By contrast, Mańczak (2000) attempts to show that the lexical connections between languages, which Euler regards as less significant than morphological parallels, are more important.

8. The main components of this analysis were laid down by Krahe 1954. For a survey of research in this area, see K.H. Schmidt 1986.

9. A few examples: Lat. *lingua* (Old Lat. *dingua*), Go. *tuggō* 'tongue'; Lat. *caput*, OIcel. *hǫfuð* 'head'; Lat. *collus*, Go. *hals* 'neck'; Lat. *līmus* 'mud', OE *lām* 'loam'; Lat. *aqua*, Go. *aƕa* 'water'; Lat. *grāman* < **ghras-men-*, Go. *gras* 'gras' (see Krahe & Meid 1969: I, §4, with further examples).

10. For a response to a peculiar hypothesis aligning North Germanic with Latin and East and West Germanic with Osco-Umbrian, see Seebold 1986: 174–5.

11. On more recent Gallo-Roman loans in Gmc., from the first half of the first millennium CE, see Guinet 1982.

12. See, e.g., Polomé 1982a, 1982b, 1987b: 234–5, 1997, Lehmann 1985, Seebold 1986: 172–7, and the references in §6.2. This view is implicitly contradicted by Hoffmann (1955), who finds that Go. *qimiþ*, OHG *quimit*, etc. 'comes', must derive formally from a PIE aorist subjunctive.

1.5   Substrate influence upon Germanic

According to the prevailing view, Indo-Europeans in central Europe first migrated north in the first half of the third millennium BCE, and they were successful because of technological innovations they carried with them, particularly in connection with warfare (see, e.g., Gimbutas 1997: 240–68, 321–31, also Polomé 1987b, and cf. §1 *supra*). It is natural to assume that in such a situation the language of the Indo-Europeans was adopted by the peoples they conquered (see, e.g., Meid 1984), and therefore it should be expected that some of the distinctive traits of the individual IE branches and languages should be derivable from pre-IE languages spoken in Europe. Quite a number of Germanic terms for flora and fauna and products made from them have no plausible IE source, and this is an area in which it should be expected that local terms already in use should have been retained (see, e.g., Polomé 1986a: 665–70, 1992a, Bandle *et al.* 2002–5: I, 572–93, Kroonen 2013b). For the same reason, many place names must be pre-IE, especially in the area of hydronymy.[1] The study of substrate influence upon Germanic, however, is laden with difficulties, not least of which is that little or nothing is known for certain about the presumed substrate languages (or language?) involved.[2] Their features can be divined only by identifying them with features of Germanic that mark it as different from other IE branches, and yet this leads to circular reasoning, since it is generally impossible to be certain that any given unusual Gmc. feature does not have some origin other than substrate influence.

Nonetheless, certain features do suggest substrate influence upon Germanic. Salmons (1992) discusses three such features, though he also raises questions about their validity. One is the confusion of /ɑ/ and /o/ in languages of the northern European linguistic continuum, as evidenced by perceived borrowings (e.g. *ɔblu 'apple') from a substrate language in which no distinction between the two vowels was maintained (see Hamp 1979, and cf. Adams 1985, arguing that 'apple' is an IE word). Another feature is unusual word structure. It is a peculiarity of PIE that biconsonantal roots in the language do not generally contain two plain voiced stops, e.g. no *deg- (§6.2). A possible Gmc. example is OIcel. *kati* 'small ship', NLG *kat* 'small vehicle' (Orel 2003: 211). A third feature is roots containing *b, especially in initial position, as this sound probably was not part of the PIE consonantal inventory, at least in initial position (§§6.1–2, but cf. Meid 1984: 107). Examples are OHG *pfluog* 'plow' < *blōg- and OIcel. *skip* 'ship' < *skib-. Orel 2003 in fact lists 32 Gmc. etyma with initial *p-*. Boutkan (1998, 1999), on the other hand, proposes to explain unusual suffixal ablaut alternations as a substrate effect, e.g. *-uð- beside *-ið- in OE *hēafod*, OIcel. *hǫfuð* vs. Go. *háubiþ*, OS *hōbid* 'head'.

Although there has been widespread disagreement about the extent of the substrate vocabulary in Gmc., most scholars regard the incidence as particularly high in this branch: e.g., Markey (1988a: 7–8; cf. Kallio 1997: 127) estimates that such constitutes 28 percent of the Germanic 'core' vocabulary.[3] Given the obstacles to establishing substrate influence, it should not be surprising that the endeavor has produced some especially speculative and fanciful attempts.[4] In this respect it is prudent to heed the advice of Polomé (1989: 54–5) about what criteria should be taken into account before lexical borrowings are posited:

> (a) the lexical items under consideration must either belong to the basic vocabulary of the language or relate to the type of cultural activities that characterize the civilization of the pre-Indo-European population or describe specific elements relevant to the ecology of the area; (b) there must be clear evidence that the terms belong to the archaic vocabulary of the Northern European languages under investigation and that they can not plausibly be explained as part of their Indo-European heritage; (c) the vocabulary tentatively identified as 'non-Indo-European' must be screened for possible ancient borrowings from neighboring language families or 'Wanderwörter';[5] d) the terms must be analyzed linguistically to look for any discrepant phonological and/or morphological features that would point to their non-Indo-European background.

Despite much fruitless discussion, the etymology of Latin *Germani* is unknown (see, e.g., K.H. Schmidt 1991: 132–3). Quite possibly the term is not Germanic in origin, or it originally applied to a small group of Germanic speakers, but it was always a Latin term, not natively applied to themselves by speakers of Germanic languages (see Meid 1986: 210–11, Wagner 1986a).

1.   See, e.g. Krahe 1954, 1964, Udolph 1990. For a summary of Krahe's views, as well as a summary of criticisms leveled against them, see H.F. Nielsen 1989: 19–22.

2.   Wiik (1995, 1997, and elsewhere) has argued that such Gmc. features as initial stress, Grimm's law, and Verner's law are due to a Uralic substrate, but the arguments are implausible: see Kallio 1997. Substrate vocabulary plays a role in the 'Nordwestblock-Hypothese' of Hans Kuhn, elaborated in many of his publications (e.g. Hachmann *et al.* 1962), of a culture neither Celtic nor Germanic along the North Sea coast up to the Iron Age: for discussion and partial support, see Meid 1986, and for an overview of the evidence, see Nowak 2011. Schrijver (2014) attempts to remedy the problem of the unknown substrate by focusing chiefly on relatively recent prehistory and on languages in which the substrate can be identified on historical grounds with some confidence, e.g. Celtic for English and Romance for Dutch, though he also locates the origin of Germanic in a Finnic substrate speaking IE (2014: 158–96). See Schrijver 2004 on NWGmc. and Saami. The literature on Celtic influence on English is especially extensive: see, e.g., Filppula & Klemola 2009, with references.

3.   On the other hand, Polomé (1987b: 236), interpreting the findings of Bird 1982, finds that in the entries in Pokorny 1959–69, Germanic has the highest incidence of inherited IE vocabulary of any IE branch and the highest level of co-occurrence with other branches. See also Scardigli 1987.

4.   For bibliography, see Schrodt 1976 and Vennemann 1984a, the latter arguing for a non-IE *superstrate*, an idea dismissed by Markey (1986: 254 n. 6). An example of a lexical study with notable methodological shortcomings is Gysseling 1987, critiqued by Polomé 1989. Several unconvincing attempts have been made to explain Grimm's law, and other non-lexical distinguishing features of Germanic, as due to a substrate, e.g. Devleeschouwer 1985–6: 28–9.

5.   Author's note: As Polomé explains, *Wanderwörter* are "words that have spread with the object, like the native American designations of products of the New World, e.g. *potato, tomato, chocolate*, etc.: a classical example is 'hemp' (ON *hampr*, OE *hennep*, OS *hanap*, OHG *hanaf*) which entered Germanic before initial *k*-became *h*- (cf. OCS *konopljá*, Lith. *kanapës*, OPruss. *knapios*, Alban. *kanep*, Gk. *kánnabis* [whence Lat.

cannabis])—the term being assumed to have been borrowed from an undetermined eastern language (taken over from the Scythians or the Thracians by the Germanic peoples)" (Polomé 1993: 45).

1.6   The reconstruction of Proto-Germanic

The hypothetical language from which the Germanic languages descend is referred to as Proto-Germanic. The methods used to reconstruct Proto-Germanic are in some respects different from those used to reconstruct PIE. The latter is arrived at by comparison of the IE languages and the reconstructed protolanguages from which the attested IE languages derive, with minor elaboration on the basis of internal reconstruction.[1] The shape of Proto-Germanic, on the other hand, must be determined not only by these methods but also by taking into account known features of PIE. For example, the alternations governed by Verner's law (§6.6) cannot be explained solely on the basis of what is observable in the Germanic languages themselves; Verner relied upon patterns of accentuation in Sanskrit verbs to explain the alternations, and thus he reconstructed for Proto-Germanic a pattern of alternating accent not reconstructible (or at least not recognizable) from the evidence afforded by the Germanic languages alone.

It must be kept in mind, as well, that there is something unrealistic about the way protolanguages are generally reconstructed. Under the comparative method, related languages are compared in order to arrive at a unitary reconstruction of a uniform language such as the *Stammbaum* theory invites (§1.2), whereas all natural languages show internal variation, which may correlate, for example, to sociolects and regional dialects. It is best, therefore, not to lose sight of the fact that Proto-Germanic as reconstructed is an abstraction and must not be assumed to represent in all its details any actual prehistoric language, no matter how close an approximation it may be to that. For this reason and others, some scholars prefer to discard the idea of a 'Proto-Germanic' language and refer only to Common Germanic, by which is meant a stage in the development of the Germanic languages when all dialectal and sociolectal varieties were still mutually intelligible.[2]

Another layer of abstraction to be recognized is particularly evident in regard to phonology. The comparative method allows the reconstruction of a phonemic system whose members, for the sake of convenience, are represented by phonetic symbols, though the phonetic associations of such symbols may be too definite for reconstructed phonemes. Phonemes are by their nature abstractions, being mental categories into which actual speech sounds are grouped. Reconstructed phonemes are even more abstract, since the range of actual sounds they may have encompassed is largely irrecoverable. For example, the reflexes of the phoneme reconstructed as PIE *$\bar{e}$ are identifiable in the modern Gmc. languages, e.g. Mod.Icel. /ɑu/, NHG /ɑ/, PDE /i/, and from these may be reconstructed a PGmc. phoneme, but it cannot be known for certain what precise range of sounds the reconstructed phoneme represents. When Penzl (1988a: 2, and elsewhere), among others, posits non-phonemic umlaut variants for the Gmc. protolanguage itself (cf. Liberman 1991: 125), or for the NWGmc. protolanguage (Penzl 1988b: 502–3), this may be the most economical way to account for the existence of phonemic umlaut variants in

the attested languages, but it is by no means inevitable that any such variants should have existed in Proto-Germanic, especially since there is no trace of them in Gothic (despite claims to the contrary, answered by Cercignani 1980a; see also Wienold 1967, and cf. Antonsen 2002: 252–3). The point is not that phonetic detail ought not to be built into any reconstruction of the proto-language, but that such detail is considerably more conjectural than the more abstract system of phonemic oppositions to be reconstructed. Penzl's objection (1988a: 3–4) that only structure is generally recoverable, and not the kind of sub-phonemic detail demanded by the glottalic theory (§9.2), is thus not fully valid, though it is true that such detail renders the theory more speculative than reconstructions that delineate phonemic oppositions without invoking any considerable degree of detail.

1.   An example of such internal reconstruction is Szemerényi's law (see Szemerényi 1996: §6.2.7.1, and see further Kümmel 2015), according to which the lengthened grade found in the nom. sg. of some IE consonant-stem classes (those ending in a nasal, a liquid, or a postvocalic dental, including *s*) represents compensatory lengthening upon loss of final *-s*, or *-h₂*, e.g. *$s\textit{ṷ}esōr$* 'sister' < *$s\textit{ṷ}esors$*. Comparison to other stem classes leads to the expectation that *-s* should originally have appeared in forms like this one, but it can be reconstructed only on the basis of considerations internal to PIE rather than to comparative evidence. Cf. Kotin 2012: 136. Szemerényi himself points out that he was not the first to posit this change, but in the subsequent literature it is commonly given his name.

2.   The meanings assigned in the literature to the terms *Urgermanisch* and *Gemeingermanisch* have been notably various. For a survey of usage, see Hutterer 1975: 74–6. On this topic see also Lane 1978, with useful observations on the relation between methodological rigor and abstractness of reconstruction.

1.7   Germanic loanwords in Finnish

A considerable number of words were borrowed from Germanic into the Finnic languages of the Baltic region, as attested chiefly by Finnish, evidencing extensive cultural influence. Some such words must have been borrowed at an early date, since they preserve features that antedate changes assignable to PGmc. For example, Finnish *rengas* 'ring' derives from PGmc. **xreŋgaz* (> Go. *hrings*, OIcel. *hringr*), antedating the PGmc. raising of **e* in this word (§4.4) as well as the reduction or loss of inflectional *-az*, preserved as such in the Gmc. languages only in Runic. Some further examples of borrowing are Finnish *kuningas* 'king' < PGmc. **kuniŋgaz* > OE *cyning*; Finnish *tiuris* 'beast' from PGmc. **diuriz* > OE *dēor*. For a comprehensive lexicon of such borrowings, see Hahmo *et al*. 1991–2012. For wide-ranging discussion, with references to the extensive literature, see Koivulehto 1999 (an anthology); also useful is Fromm 1957–8.[1] For an overview, see Koivulehto 2002.

1.   An argument for dating Germanic loans into Finnish prior to the First Consonant Shift (§6.4) is offered by Koivulehto & Vennemann 1996. On dating, see also Ritter 2002.

1.8.   The three branches of Germanic

Within the Gmc. family of languages there are three broadly recognizable groups: East, North, and West Germanic. The East Gmc. languages are all extinct, and aside from

Gothic and Crimean Gothic, only Vandalic and Burgundian are attested with any security, though only in the most fragmentary state. The North Gmc. languages are those of both continental and insular Scandinavia, along with the languages of Scandinavian colonizers. The remaining languages comprise West Germanic, a group that in the present day includes High and Low German, Yiddish, Luxembourgish, Pennsylvania German, Dutch, Afrikaans, Frisian, English, and Scots.

Given the fragmentary nature of the evidence aside from Gothic (§1.11), then, it is not possible to identify features that can with assurance be called distinctively East Germanic. A few of the many features that distinguish Gothic from the NGmc. and WGmc. languages, however, may be indicated: (a) retention of reduplication in the seventh class of strong verbs, without innovatory replacements for these (§12.20); (b) genitive plural inflection in *-ē* in all noun classes except feminine *ō-*, *ōn-*, and *ein*-stems (cf. OHG OS *-o*, OE ON *-a*, §7.8); (c) dat. pl. ending *-am* (PIE *-omis*, North and West Gmc. *-um*) in *a*-stem, *nd*-stem, and masc. and neut. *n*-stem nouns; (d) acc. pl. endings *-ans*, *-ins*, *-uns*; (e) vocative case in nouns; (f) dual forms in verbs; (g) inherited synthetic passive forms in the present tense (§12.29); (h) 3 sg. imp. forms of verbs; (i) coalescence of PGmc. *i* and *e* (§4.5); (j) the loss of alternations under Verner's law in verbs (§6.6); and (k) fairly transparent compounding in the formation of weak preterites, e.g. 3 pl. pret. *dōmidēdun* 'judged' (Penzl 1985: 161). Gothic also lacks umlaut and other *Fernassimilationen* (distance assimilations) in vowels (§§4.3–4, 4.7–8); and PGmc. *ē₁* fails to be lowered.[1]

North Germanic is distinguished from the other two branches by features including the following: (a) (probably) stressed NGmc. *ǣ* > *ā* (§4.6, but unstressed *e*, later *i*, §5.6); (b) *ai* > *æi* (> OIcel. *ei*, §4.9); (c) non-initial *h* is lost except before *s* (§6.14); (d) initial *j* is lost (§6.4, though a new initial *j* arises by stress shift in diphthongs, §§4.8–9); (e) *w* is lost before back vowels and their umlauts, even when *r* intervenes (§6.4); (f) final *ld*, *nd*, *ŋg* yield *lt*, *nt*, *ŋk*, later *lt*, *tt*, *kk* (§6.4); (g) *n* is lost, with compensatory lengthening of the preceding vowel, before *s* (§4.9, though this also occurs in NSGmc., §4.11); (h) there arose a middle voice marked by the suffix *-sk*, *-mk* (and variants) from the reflexive pronouns *sik*, *mik* (§12.29); (i) there arose a definite article *hinn*, placed before adjectives or after nouns, to which it was later suffixed (§8.11); (j) pretonic syllables, including verb prefixes, were lost (§5.7).

Features setting West Germanic apart from East and North Germanic include these: (a) consonant gemination (§6.15, though velars are geminated also in North Germanic, §6.14); (b) formation of the 2 sg. pret. of strong verbs with *-i* (OE *-e*; §12.25); (c) loss of the nom. sg. ending *-az* in masc. *a*-stems (§7.8); (d) change of PGmc. /ð/ to /d/ (§6.16); (e) loss of /w/ internally after velar consonants, as in OHG OS OE *singan* 'sing' : Go. *siggwan*, OIcel. *syngva*;[2] (f) loss of weak verbs in *-nan* as a recognizable class (§12.48); (g) gerunds in *-anja-* (§12.30); (h) nom. sg. masc. *-ô(n)* in the *n*-stems; (§7.31); (i) formation of abstract nouns with the suffixes OHG *-heit*, *-schaft*, and *-tum* and cognates; and (j) retention of *dōn* 'do' as an independent verb. For further examples (not all of them unassailable), see Voyles 1971 and the other works cited by Stiles (2013: 15 n. 16).

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1.   This is apparently a general EGmc. characteristic, as *ē* appears as *i* in elements of certain Burgundian and Vandalic personal names, e.g. *-mir(is)*, *-rid* (= Go. *-mērs*, *-rēþs*).

2. This rule is complicated by the divergent developments of *x^w* in OE *sēon* 'see' < *$*sex^wana^n$* and pret. pl. *sāwon* < *$*sēʒ^wun(þ)$*. That the loss of postconsonantal *w* was a late development ascribable to the individual languages is shown by the velar stop (rather than affricate) in the OE *ja*-stems *þicce* 'thick', *mirce* 'dim' (Luick 1914–40: §637 Anm. 4).

1.9   The grouping of the three Germanic branches

After much controversy, there seems now to have emerged a fairly broad consensus that East Germanic branched off from Proto-Germanic with the departure of East Germanic speakers (Goths and others) from the Baltic littoral, an event dated to some period between the first century BCE and the second and third centuries CE. The remaining dialect continuum then corresponds to what is commonly called Northwest Germanic,[1] out of which North and West Germanic are to be derived. There is little agreement, however, about how North and West Germanic developed out of this continuum: see §1.10.

That the North and West Gmc. languages should derive from a Northwest Gmc. protolanguage is by no means an inevitable assumption, and indeed, a number of nineteenth-century scholars, including Müllenhoff 1900: 108–32, Scherer 1995 [1868], and Zimmer 1876, believed that North and East Gmc. share enough features that they should be assumed to derive from a Northeast Gmc. protolanguage—a supposition no doubt influenced by the widespread belief that the Goths originated in Scandinavia (see §1.12). The idea of East and North Gmc. unity was revived by Schwarz (1951; similarly Jungandreas 1949: 30), whose refinement of the hypothesis is to suppose that North Sea Germanic originally was closely allied with the Gotho-Nordic group, but by the third century CE it was linguistically aligned with the Gmc. dialects of the continent.[2] The following are among the similarities that have been remarked between East and North Germanic:

(a)   The rise of stop articulation in the Verschärfung, whereby PGmc. *-jj-* > Go. *-ddj-*, OIcel. *-ggj-*, and PGmc. *-ww-* > Go. OIcel. *-ggw-*. See §6.10.

(b)   Retention of the ending *-t* < PIE *-tha* in the 2 sg. pret. ind. of strong verbs (vs. WGmc. *-i*), as in Go. OIcel. *bart* vs. OS, OHG *bāri*, OE *bǣre* 'bore': see §12.25.

(c)   The inflection of present participles as *īn*-stems, rather than as *jō*-stems, as in West Germanic (§9.9).

(d)   The extensive preservation of inchoative verbs with a nasal infix, e.g. Go. *fullnan* 'become full' and OIcel. *stirðna* 'become stiff'. See §12.48.

(e)   The use of the analogical ending PGmc. *-jau* in the 1 sg. pret. sj., e.g. Go. *bērjáu*, OIcel. *bǣra* 'bore' (cf. OS, OHG *bāri*, OE *bǣre* < PIE *-īm*). See §12.26.

(f)   Absence of any reflex of PGmc. *$*dō-ana^n$* 'put, do' as an independent verb (cf. Go. *táujan* 'do', OIcel. *gørva* 'do').

(g)   The development of *$*ū$* to *ō* before a vowel in Gothic and East Norse, e.g. Go. *bauan*, Old Swedish *bóa* 'dwell'; cf. OIcel. *búa*.

(h)   PGmc. *-ngw-* is retained (i.e., it does not lose *w*, as in WGmc.).

(i)   The ending of the nom. sg. of masc. *a*-stem nouns is retained (Go. *-s*, OIcel. *-r* < PGmc. *-az*), though it is lost in WGmc.

(j)   There are no short forms of the verbs 'stand' and 'go' (cf. OHG *stān/stēn*, *gān/gēn* beside *stantan*, *gangan*; but short forms are found in East Norse, e.g. Danish *stå*, *gå*).

(k)   There are no gerunds of the type OE *tō sāwenne*, OHG *zi sāwenne* 'for sowing'.

(l)   There are no forms of the 1 sg. pres. ind. of 'to be' in *b-*: to Go. *im*, OIcel. *em*, cf. OE *bēo(m)*, OS *bium*, OHG *bim*.

(m)   A few items of vocabulary show agreement of East and North Germanic as against West Germanic (see Schwarz 1971), including Go. *watō*, *-ins*, OIcel. *vatn* vs. OE *wæter* 'water' (a PIE heteroclitic stem; but there is some evidence for the retention of the *r*-form in skaldic poetry: see §7.42); Go. *fōn*, gen. *funins*, OIcel. *funi*, vs. OHG *fūir*, *fiur*, OS *fiur*, OE *fȳr* (another PIE heteroclite); Go. *sauil*, OIcel. *sól* vs. OE *sunne* 'sun'; Go. *himins*, OIcel. *himinn* 'heaven' (cf. OE *heofon*, OHG *himil*); and Go. *leitils*, OIcel. *lítill* 'little' (cf. OE *lȳtel* < **lūtilaz*).

These similarities are more suggestive than probative: for example, (a) is not unlikely to represent independent developments in North and East Germanic (see §6.10), and (b) may represent a change in West Germanic after the separation of North and West Germanic. If (e) were undisputed, it would constitute fairly good evidence, but there are significant reasons to doubt (see §12.26 n. 3). But the relevance of these similarities to the problem of determining the affinities of Gothic is diminished if the matter is not observed strictly from the standpoint of a *Stammbaum* analysis of Germanic affiliations, but allowance is made for areal changes spreading across related dialects of Germanic (see §1.2).

Some further possible shared features are itemized by Euler (2002: 12). Schwarz (1951) lists 25 commonalities between Gothic and Old Norse in support of his theory. The idea of East and North Germanic unity has garnered some support (e.g. Schirmunski 1965, Lehmann 1966), but it has also provoked much criticism, especially by Kuhn (1952, 1955–6; see also Markey 1976),[3] who argues that commonalities that are not shared inheritances are either independent innovations or changes originating in a speech community extending across the Baltic before the migration of the Goths to the Black Sea. As for differences between North(west) Germanic (in Runic form) and Gothic, the following have been noted (see Noreen 1970: §4): (a) preservation of the inflectional vowel in the nom. and acc. sg. of *a-* and *i-*stem nouns, e.g. Runic *þewaʀ* 'servant', **staina** 'stone', **-gastiʀ** 'visitor': Go. *þius, *stáins*, *gasts*; (b) gen. sg. in *-as* in *a-*stems, e.g. Runic **godagas** (name, with *ō*): Go. *dagis* 'day'; (c) preservation of *-ē* as such in the dat. sg. of *a-*stems, e.g. Runic **-kurne** 'grain': Go. *kaúrna*; (d) gen. and dat. sg. in *-an* in *an-*stems, e.g. Runic **-hᵃlaiban** 'bread': cf. Go. *an-*stem dat. sg. *ahin* 'mind'; (e) dat. sg. in *-iu* in *u-*stems, e.g. Runic **kuni-mu[n]diu** (name) : cf. Go. dat. sg. *sunáu* 'son'; (f) nom. pl. in *-iʀ* in *r-*stems, e.g. Runic **dohtriʀ** 'daughters' : Go. *dohtrjus*; (g) 1 sg. weak pret. in *-ō*, e.g. Runic **tawido** 'made': Go. *tawida* (see §12.39 *infra* on this). Most of these differences, however, could be explained plausibly as due to changes specific to Gothic subsequent to the development of a supposed Northeast Germanic into separate North and East Germanic branches.

There are some commonalities of Gothic and West Germanic (particularly High German) that set them apart from North Germanic, but they are few, the most salient

being the following: (a) the use of Go. *haban* 'have' and its cognates to express pos-session, as against OIcel. *eiga*; (b) the equivalence of Go. *is* and OHG *er* 'he', as opposed to OIcel. *hann* (but OE OS *hĕ*, OF *hī*); (c) agreement in demonstrative pronouns in the gen. and dat. sg. feminine and gen. plural: OHG *dera, deru, dero*, respectively, like Go. *þizōs, þizai, þizō* (fem.), vs. OIcel. *þeirar, þeiri, þeira* (see Schwarz 1951, Rösel 1962 for further examples). But all of these may be regarded as archaisms retained from Proto-Germanic, so they need not be credited as evidence for East and West Germanic unity.[4]

More significant are the similarities between North and West Germanic that set them apart from East Germanic. The most important of these (some of which were mentioned above, §1.8) include the following: (a) development of *ē₁* (PIE *ē*) to *æ* (§4.6); (b) development of early PGmc. unstressed *o* to *u* before *m*, as in the dat. pl. inflection *-um* (Go. *-am*; §5.2); (c) replacement of the reduplicated preterite (§12.20); (d) develop-ment of unstressed *ai* and *au* to *æ* and *ō*, respectively (§5.6); (e) umlaut (§4.7); (f) phonemicization of [o] > /o/; (g) rhotacism (§6.6); (h) loss of the inherited synthetic middle voice (§12.29); (i) gemination before /j/ (restricted in North Germanic to /g/ and /k/); (j) gen. pl. ending *-ōnô* in the *ō*-stems; (k) change of /x/ to a labial consonant between a back vowel and a coronal sonorant consonant (Go. *aúhns* 'oven' : OE *ofen*) and of /ɣ/ to /w/ between a back vowel and *m* (Go. *bagms* 'tree' : OE *bēam*);[5] and (l) proximal demonstratives, e.g. OE *þĕs* beside *sĕ*, OIcel. *sjá/þessi* beside *sá* (Hamp 1985; H.F. Nielsen 1976).[6] Some further ways in which East Germanic differs were listed above (§1.8), though they have little bearing on the question of the relations between North and West Germanic. Schwarz (1951) would explain the commonalities of NWGmc. as due to relatively late influence of WGmc. upon NGmc., though of course this will not account plausibly for features (a) and (b). As pointed out by Kuhn (1955–6), the language of early Runic inscriptions does not allow any pronounced differentiation of North and West Germanic, the divide between which he would therefore date to the fifth century, whereas Isakson (2000) dates the divide to the sixth.[7] It may be, as some have charged (see Makaev 1962: 122; 1996: 20–4; but cf. Antonsen 2002: 297–314), that the language of inscriptions in the Elder Futhark is artificially conservative, or that it is a *koine* (see Krause 1968: §32, Düwel 1983: 15–16; cf. H.F. Nielsen 2000: 287), but even if one accepts such arguments, no very marked differentiation between North and West Germanic can plausibly have occurred before the third century, and most scholars maintain that the emergence of differentiating characteristics should be dated ca. 500. See Antonsen 1967, E. Haugen 1970: 48, Markey 1976, Penzl 1988a, 1988b, 1989, 1996, Klein 1992: 223–4, but cf. Grønvik 1981: Chap. 3, *idem* 2010; Laur 1990; Stiles 2013: 8; see also several of the essays in Askedal *et al*. 2010. For accounts of the differing views on this question, see H.F. Nielsen 1989: 5–12, 2000: 56–69.

For an exceptionally extensive accounting of features shared among the different branches of Gmc., see H.F. Nielsen 2000: 203–40; also Grønvik 1998b: 67–82 and the contributions to Bandle *et al*. 2002–5: 2.553–72. Stiles (2013) furnishes a concise biblio-graphical account of scholarly views.

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1. Antonsen (1965: 31) objects to this terminology, preferring simply 'Germanic' because the departure of the Goths should not have had any effect on the mother tongue. For a response to the objection, see H.F. Nielsen 1989: 95. For some nineteenth-century studies supporting the idea of West Germanic as a protolanguage, see Schleicher 1860, Förstemann 1869: 163–4, 185–6, Bezzenberger 1880: 152–5, and Streitberg 1896: §13. K.M.

Nielsen (1975) offers a negative assessment, Voyles (1968, 1981), Findell (2012), and Ringe (2012) positive ones.

2.   For further discussion of affinities between North Germanic and North Sea Germanic, with references, see Laur 1988: 125–6; also Antonsen 1975: 26 (assuming a unity of North Gmc. and Ingvaeonic that he refers to as Northwest Gmc.), H.F. Nielsen 1975, 1994c, 2004, Seebold 2004.

3.   For criticisms of Schwarz's hypothesis, see Brinkmann 1951, Philippson 1954, Rosenfeld 1955c, Adamus 1962, and Schützeichel 1976. See also Penzl 1988b: 498, with further references.

4.   Snyder (1989) supports the idea of close affinities between East and West Germanic on the basis of a statistical analysis of nouns and adjectives with *l*- and *r*-suffixes.

5.   But cf. W. Laur 1990: 218, assuming PGmc. *baumaz*.

6.   See Antonsen 1975: 26 and Stiles 2013: 8–9 for some further commonalities. Some of the studies in Marold & Zimmermann 1995 are also relevant.

7.   On the possible early development of PGmc. *ē̜* to NGmc. *ā*, see §4.6. See further below (§1.10) on alternative views about NWGmc.

1.10   The development of Northwest Germanic and the Ingvaeonic problem

The question how the North and West Germanic languages developed out of Northwest Germanic has been much debated. According to the older view, prevalent in the nineteenth century, Northwest Germanic simply split into two protolanguages, a Scandinavian one and a continental one, but such an assumption has been repeatedly disputed.[1] The question is thus largely equivalent to the question whether the assumption of a single WGmc. protolanguage is valid. Karstien (1930: 1127b), for example, supposes that innovations common to West Germanic actually postdate the rise of Ingvaeonic. A particularly influential view is that of Maurer (1952; similarly Frings 1932), who rejects the idea of a West Germanic aboriginal unity, replacing it with three discrete culture groups, North Sea Germanic (OE, OF, OS), Weser-Rhine Germanic (Franconian), and Elbe Germanic (Alemannic, Bavarian, Lombardic), corresponding to the tripartite division of Germanic *Mannus*-groups into *Ingaeuones*, *Istaeuones*, and *Herminones* outlined in cap. 2 of Tacitus's *Germania*. Maurer's chief contribution to the debate is his employment of historical and archaeological evidence, yet this is also its greatest weakness, since there is no good reason to assume that ethnic and cultural differences necessarily correspond to linguistic ones: see particularly H.F. Nielsen 2004. On this analysis, some of the characteristic WGmc. features itemized in §1.8 would have to be explained as later developments spreading among related West Germanic languages, a circumstance that has occasioned much criticism of views like Maurer's, especially by Kuhn (1944: 8–9); see further the essays in Naumann 2004 and Harm 2013.

In a tradition going back to Müllenhoff (1900), a great many studies of the development of West Germanic assume a tripartite division into Ingvaeonic, Istaevonic, and Erminonic branches, on the basis of the distinction drawn by Tacitus.[2] This is probably not a sound assumption, on a variety of grounds. As noted above, ethnic distinctions need not imply linguistic ones. Moreover, it is to be doubted whether the language of the earliest Runic inscriptions can conclusively be identified as North Germanic instead of Northwest Germanic (see §1.9 *ad fin.*), and so the ethnic distinction drawn by Tacitus at the end of the first century CE must be assumed to have antedated any now-detectable

linguistic difference by several centuries.[3] In addition, although Ingvaeonic can be defined fairly narrowly on a linguistic basis (see below), practically nothing is known about Istaevonic or Erminonic, so that much guesswork is inevitably involved in any tripartite division.

Particularly important for the question of West Germanic unity are the position and composition of Ingvaeonic or North Sea Germanic, the latter term now tending to prevail over the former.[4] The majority view is that the North Sea Germanic group includes not only English and Frisian but also Old Saxon, and the reason Old Saxon is less plainly allied to this group is that the language lost some of its Ingvaeonic features under Franconian influence starting about 700 CE, due to Frankish political domination. Some do not regard Old Saxon as a member of this group (e.g. Rösel 1962), but Stiles (2013: 19–21) catalogues the effects of High German influence on the changing language, and why it must be regarded as Ingvaeonic. A. Campbell (1947) identifies the following Ingvaeonic features as definitive: (a) fronting of WGmc. $\bar{\breve{a}}$ except before nasal consonants (§4.12); (b) development of WGmc. *au to ā (in OFris., not in OE or OS: §4.14); (c) palatalization of velar stops before front vowels (§6.17); (d) loss of nasal consonants before fricatives (§4.11);[5] (e) failure to participate in the High German Consonant Shift (§6.21); and (f) elimination of distinctions of person in the plural of verbs (e.g. §12.24).[6] The distribution of these features across the group is uneven: for example, Old Saxon lacks feature (a) and shows only traces of (c), and in regard to (b), Old English has ēa rather than ā, whereas literary OS has ō.

In the view of some (e.g. Schwarz 1952: 276 and Rösel 1962: 46–7), North Sea Germanic was originally more closely allied with North Germanic and only later acquired affinities to West Germanic. The dominant view, however, is that North Sea Germanic is simply a dialect of West Germanic.[7] There is less agreement about whether the distinctive features of North Sea Germanic developed on the Continent before the departure of the Anglo-Saxons or later, as cultural exchange continued across the North Sea, the latter being the influential view of Kuhn (1955–6). By contrast, in the view of Antonsen (1975: 26–8), there existed by ca. 100 CE distinctions among East, South, and Northwest Germanic, with Ingvaeonic becoming distinct from the last about a century later. The most detailed studies (Markey 1976: 36–71, H.F. Nielsen 1985: 148–54, 255–7; but see also Fulk 1998a: 154) suggest that only a few of the distinctive features of Ingvaeonic developed before the departure of the Anglo-Saxons.

1. Such is also the view of, e.g., Kuhn 1955–6 and of many handbooks. For a thorough review of the literature, see H.F. Nielsen 1989: 67–107.

2. Tacitus's term *Ingaeuones* is generally assumed to be an error for *Inguaeones* (the name used by Pliny) under the influence of the term *Istaeuones*. For archaeological evidence in support of this tripartite division, see Mildenberger 1986.

3. In response to the attempt of Jungandreas (1974) to establish four dialect areas of Germanic in the first century CE, see Hofstra 1976.

4. For arguments in favor of using the term 'North Sea Germanic' to designate the present-day languages, see Laur 1984, with references; for an opposing view, Stiles 2013: 10 n. 8.

5. But cf. Hermann (1978: 300–1), arguing that this change also affected North Germanic, though earlier there had occurred assimilations like [nθ] > [nː] that prevented its application in most of the original environments.

6. Markey (1976: 36–71) identifies thirty-six features as typically Ingvaeonic, among the most important of which is loss of *-z in monosyllabic pronouns like OE dat. *mĕ* (cf. OHG *mir*). Another feature left out of

consideration in Campbell's list is use of *hĕ* for the third person sg. masc. pronoun. See also the lists in Stiles 2013: 18, 21–3.

7.   For an account of the history of ideas about West Germanic, see Stiles 2013, emphasizing the importance of chronology and diatopic variation for establishing the validity of assumed WGmc. unity. His conclusion is that most Ingvaeonic innovations postdate the period of WGmc. unity, but a few, being shared with NGmc., must antedate the rise of WGmc. as a separate branch. For an account of the external history of Germanic as it pertains to the grouping of the Gmc. languages, see Seebold 2013.

1.11   East Germanic

On the basis of ethnographic information supplied primarily by Pliny the Elder and Tacitus (1st cent. CE) and Ptolemy (2nd cent. CE), which are the earliest sources, a number of named early Germanic groups are to be counted among the East Germanic peoples.[1] They at one time inhabited the lands south of the Baltic Sea, east of the Elbe, as far as the Vistula, an area later to be called Pomerania. Usually included in this group are Goths (among whom are probably to be counted Gepids, Greuthingi, and Thervingi), Bastarnae, Burgundians,[2] Heruli, Rugii, Scirii, Silingi, and Vandals. No East Germanic language survives to the present day, and only the Goths have left extensive remains of their language. Of the remainder, the only evidence for East Germanic languages is isolated words, almost exclusively names in Burgundian and Vandalic.[3]

   The Gothic language is known chiefly on the basis of the surviving fragments of a Bible translation made from Greek by Ulfilas (Go. *Wulfila*, ca. 310–383), bishop of those Christian Visigoths settled in Moesia by Constantine (though Ratkus 2018 argues against the sole authorship of Ulfilas). Five manuscripts together preserve, in a fragmentary state, the four gospels, a number of epistles, portions of Nehemiah, a few words from Genesis, a fragment of a Gothic calendar, and eight fragments of a commentary on John referred to by the Gothic title assigned in modern times, *Skeireins* ('Explanation'). There are also Gothic names preserved in various sources, and a few stray words, including some runic inscriptions.[4] In addition to these remains, in 2010 there was discovered in Bologna a palimpsest of a Gothic manuscript containing a collection of passages from the Bible and from *Skeireins*, some of them not otherwise preserved, as well as a few words of narrative that do not derive from scripture: for description and text, see Finazzi & Tornaghi 2013, with an improved transcript in Falluomini 2014.

   The Gothic records are written in an alphabet reportedly devised by Ulfilas (see Figure 2), based chiefly on Greek characters, with resort to Latin and runic characters

𐌰	𐌱	𐌲	𐌳	𐌴	𐌵	𐌶	𐌷	𐌸	𐌹, ï	𐌺	𐌻	𐌼	𐌽
1	2	3	4	5	6	7	8	9	10	20	30	40	50
a	b	g	d	e	q	z	h	þ	i	k	l	m	n

𐌾	𐌿	𐍀	𐌵	𐌵	𐍃	𐍄	𐍅	𐍆	𐍇	𐍈	𐍉	↑
60	70	80	90	100	200	300	400	500	600	700	800	900
j	u	p	—	r	s	t	w	f	x	ƕ	o	—

Fig. 2. The Gothic alphabet, with numerical values and transliterative equivalents.

where necessary. In the figure, the first row represents the Gothic character, the second its value when used as a numeral (agreeing to the extent possible with the numerical use of alphabetic characters in Greek), and the third its standard transliteration in studies of Gothic. The character ï is used only initially and to represent a heterosyllabic vowel, as in *fra-itiþ* 'devours'. The characters ꝗ and ↑ are used only as numerals (90 and 900, respectively), and ⅹ occurs only in the name *Xristus*.

In this spelling system the vowels *a* and *u* are ambiguous as to quantity, and therefore they have been marked in this book with a macron when etymologically long.[5] The tense vowels *ē*, *ō*, and *ei* are, at least historically, always long, the last having the value /iː/, and *i* is always short. Among the digraphs, *iu* is a falling diphthong, whereas *ai* and *au* are ambivalent: they are usually assumed to represent /ɛ/ and /ɔ/ (perhaps ranging allophonically to [e] and [o], sounds otherwise representing a gap in the vowel inventory), respectively, when they are derived from simple vowels (see §4.5), in which event they are conventionally marked *aí* and *aú* by grammarians; but they may also be derived from PGmc. *ai* and *au*, in which event they are marked *ái* and *áu*, probably with the values /ɛː/ and /ɔː/, to judge by Ulfilas's spelling of biblical names and by fourth-century Latin spellings of Gothic names, though the matter has been much contested.[6] On the value of *ai* and *au* not marked with an acute, see §4.5. The character ѵ (*w*) is used also to represent Gk. *υ* and *οι* (both /y(ː)/ by the fourth century) in borrowed words, e.g. *swnagōgē* (ϲυναγωγῆ) 'synagogue' and *Fwnikiska* (*Φοινίκισσα*) 'Phoenician'. Among the consonants, *q* and *hv* are labialized velars /kʷ/ and /xʷ/ (the latter perhaps with allophone [hʷ], §6.11). The characters *b*, *d*, *g* represent voiced stops initially and after nasal consonants (and in gemination, §6.9), otherwise voiced fricatives, except that they are stops also after (probably) any consonant.[7] On the model of Greek spelling, /ŋk, ŋkʷ, ŋg/ are written *gk*, *gq*, *gg*, though the last may also represent the product of the Verschärfung (§6.10)*,* as in *bliggwan* 'beat' (cf. OHG *bliuwan*, and compare Go. *siggwan* 'sing' < PGmc. **singwanⁿ*).

A Gothic enclave persisted in Crimea into the modern era, referred to in various sources from the ninth century to the eighteenth. The only substantial witness to the Crimean Gothic language is a 1562 letter, published in 1589, from the Flemish ambassador Ogier Ghiselin de Busbecq, listing about eighty words and the lyrics of a song; see Tischler 1978 on some further witnesses. Some Crimean Gothic inscriptions of the ninth or tenth century have recently been deciphered (conjecturally: see Vinogradov & Korobov 2015, 2016), but their fragmentary state adds little of substance to what is known of the language. Because Crimean Gothic shows no trace of the lowering of *i* and *u* before *r* and *h*, Cercignani (1980a: 211–12) advises that it not be regarded as a lineal descendant of Bible Gothic.

Some useful grammars of Gothic are Wright 1954, Mossé 1956, Kieckers 1960, Krahe 1967, Krause 1968, Binnig 1999, and Braune 2004b. Kotin 2012 explores the language in depth but is not usable as a grammar. See Lehmann 1986 for a comprehensive etymological dictionary; another dictionary is Köbler 2014e. For the standard edition of the Gothic Bible, see Streitberg 2000. On Crimean Gothic, see Stearns 1989, also Grønvik 1983. For bibliography, see C.T. Petersen 2002.

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1.   For an ethnographic overview, see Bremer 1900: 819–27; on the sources, see Wrede 1886: 12–35.

2.   At one time resident on the Danish island of Bornholm, ON *Borgundar holmr*.

3.   On the Burgundian names, see Wackernagel 1868; on the Vandalic, Wrede 1886.

4.   Most of these 'Gothica minora' are edited by Massmann 1841. They are also included as an appendix in the latest recension of Streitberg's edition of the Bible fragments (2000). For an exact accounting of the remains, see Braune 2004b: §§E5–19.

5.   On the history of shifting views about whether phonemic length was a feature of Gothic vowels, see Moulton 1987.

6.   Compare, e.g., Go. dat. *Lauidjái* 'Lois' (rendering Gk. *Λωΐδι*) and Lat. *Ostrogoti*, earlier *Austro-*. For a bibliographical summary of the different proposals, see d'Alquen 1974: 19–29. Marchand (1973: 102), for example, finds it 'highly improbable' that ⟨ai⟩ or ⟨au⟩ could represent more than one sound.

7.   This conclusion is drawn on the basis of the failure of these consonants to be written as voiceless fricatives in positions in which fricatives would be expected to be devoiced, as with -*swarb* 'wiped' (3 sg.) and *alds* 'age'; cf. also *dags* 'day'.

1.12   Provenance of the Goths

The historical records of classical antiquity show plainly that Goths were present in great numbers on the northern shore of the Black Sea by the middle of the third century CE. By the end of the fourth century they comprised two groups, the Ostrogoths, living east of the Dniester, to the Dnieper and beyond, and the Visigoths, to be found between the Dniester and the Danube.[1] It is from these Pontic areas that they were dislodged by the arrival of the Huns in 375. How the Goths arrived at the Black Sea, and where they originated, are matters of debate. The usual assumption, and the one still credited by the considerable majority of scholars, has been that the account given in the sixth-century *Getica* of Jordanes is trustworthy at least in general outline: according to this account, the Goths migrated, perhaps about 100 BCE, from Scandinavia (*Scandza*) to the banks of the Vistula.[2] Their area of settlement on the southern coast of the Baltic is called by Jordanes *Gothiscandza* (presumably **Gutisk-andja* 'Gothic end', Much 1967: 487, but cf. Svennung 1972: 28: **Guti-Skandia* 'Gothic Scandinavia'), and it has commonly been assumed that this is the origin of the names of the cities of Gdańsk (NHG Danzig) and Gdynia on the Polish coast, though the derivations cannot be proved. In accordance with the account of Jordanes, the Goths have usually been identified with the Gutones first mentioned by Pliny the Elder ca. 65 CE as living on the shore of (apparently) the Baltic Sea.[3] On this reasoning the Goths have also commonly been associated with the island of Gotland and with the region of south-central Sweden called Götaland (named after the ON *Gautar*, OE *Gēatas*), from which areas they are assumed to have migrated originally.[4]

In more recent times the account of Jordanes, recorded so many centuries after the purported departure from Scandinavia, has been called into question, in part on archaeological grounds (see von Petrikovits 1985, Polomé 1992b: 57–8). In a series of studies, Mańczak has argued that the vocabulary of Gothic has considerably more in common with that of Upper German than with that of Swedish, and the origin of the Goths is thus to be sought in the southernmost parts of Germania rather than in Scandinavia.[5] In support of this analysis have been offered arguments about the greater historical plausibility of migrations eastward to the Black Sea and northward to the Vistula than from the Vistula

to the Black Sea (see Kortlandt 2001, with references). Euler (1985) examines Scandinavian Runic inscriptions to determine that some do show evidence of Gothic phonological and morphological features, so that the presence of Goths in Scandinavia is not to be doubted, though whether this is because they originated there or migrated there from the mouth of the Vistula is not a question that can be settled on the basis of such inscriptions. But if migration from the Vistula to the Black Sea is improbable, as has been claimed, migration to Scandinavia seems even less plausible, especially given the coincidence that the area to which they must be assumed to have migrated on this account is precisely that from which Jordanes says that they set out. At all events, the name of the Goths is so common in place-names in Sweden—and place-names are often among the most archaic evidence—that it is difficult to believe that the Gothic presence in Scandinavia could have been a late development (see Strid 2014).

1. *Ostro-* is to be related to Lat. *aurora*, Gk. ἔως, Skt. *uṣā́ḥ*, Lith. *aušrà* 'morning light' (hence 'east'), and *Visi-* to Lat. *vesper*, Gk. ἔσπερος 'evening'. The Goths are generally associated with the archaeological remains of the Černjahov culture in what is now Ukraine: see Heather & Matthews 1991: 51–101, Heather 1996: 18–50. For a concise account of the standard view, with extensive references, see Green 1998: 164–8.

2. See Hachmann 1970: 136–43, 458, Wolfram 1979: 34–5. This analysis is lent support by similarities between material remains of the Černjahov culture of Ukraine and of the Wielbark culture of the Polish coast. The Goths have lent their name to a number of places in present-day Sweden, including Gotland, Götaland, and Göteborg (Gothenburg).

3. In his *Geography*, of ca. 150 CE, Ptolemy, drawing on earlier sources, identifies the Γοῦται as living in Σκανδία (2.11.35) and the Γύθωνες as living on the banks of the Οὐιστούλα (3.5.20). Tacitus (*Germania*, cap. 43), ca. 98 CE, likewise places the *Gotones* on the Continent near the Baltic.

4. For extensive references to the scholarship supporting Jordanes' account, see Penzl 1985. Mottausch (1994: 133 & n. 23) and Strid (2010) also provide references. Kotin (2012: 13) mistakenly attributes to Krause (1968: 42–3) the view that the East Germanic peoples (rather than the Vandals alone) originated in northern Jutland.

5. See Mańczak 1982, 1984a, 1986a, 1987b, and the reply to the last by Salmons (1987). Phonological evidence is adduced by Grønvik (1995, critiqued by Nilsson 1996: 55–6; cf. Mańczak 1998). For criticisms of Mańczak's methodology, see Penzl 1985: 154–8.

1.13   The Runic records

Although a few runic inscriptions are generally regarded as Gothic (see §1.11; also Ebbinghaus 1990, Peterson 1998)—and certainly Ulfilas knew the Runic alphabet, since he incorporated some of its characters into the Gothic alphabet—the majority are of Scandinavian provenance and evince specifically NGmc. linguistic characteristics; on the Continental Runic inscriptions, see Findell 2012, who catalogues 90 such inscriptions. But the earliest inscriptions in Runic, Gothic inscriptions aside, reflect a stage of linguistic development in which North and West Gmc. forms cannot yet be distinguished (see §1.9).[1] These are recorded in a form of the Runic alphabet referred to as the Elder Futhark, named after its first six characters, the order of which is assured by various alphabetic inscriptions, including those on the Kylver Stone (ca. 400) and on the Vadstena Bracteate (ca. 500). The 24 characters of the Elder Futhark are presented in Figure 3 (though variant forms of individual runes are not uncommon: see Antonsen 1975: 6–10), with their usual equivalents in transliteration. (Transliterations of inscriptions in Runic are conventionally presented in boldface.) Here **þ** is always voiceless, and **b, d, g** are alternately stops and

ᚠ	ᚢ	ᚦ	ᚨ	ᚱ	ᚲ	ᚷ	ᚹ
f	**u**	**þ**	**a**	**r**	**k**	**g**	**w**

ᚺ	ᚾ	ᛁ	ᛃ	*	ᛈ	ᛉ	ᛊ
h	**n**	**i**	**j**	*****	**p**	**z/ʀ**	**s**

ᛏ	ᛒ	ᛖ	ᛗ	ᛚ	ᛜ	ᛞ	ᛟ
t	**b**	**e**	**m**	**l**	**ŋ**	**d**	**o**

Fig. 3. The Elder Futhark, with equivalents in transcription.

fricatives by position (§6.5). On the value of ʀ (which many prefer to transliterate as **z**, and which must be so transliterated in the earliest inscriptions), see §6.14. Vowels may be long or short. The value of the rare rune ᛃ is disputed; highly plausible is the argument of Antonsen (1975: 3–6, with references) that it was originally PGmc. $\bar{e}_1$ (/æ/ in his notation) and that it came to be used for a number of other sounds once the reflex of $\bar{e}_1$ developed to N(W)Gmc. $\bar{a}$ in stressed syllables and $\bar{e}$ in unstressed and consequently came to be represented by other runes. Due to loss of *j* in the rune-name **jāra^n* 'year' (> OIcel. *ár*), in late inscriptions ᛃ (**j**) is sometimes used to represent *a*, and in that event it is transcribed ᴀ. There also occur non-etymological, epenthetic vowels, rendered superscript in transcriptions, as in **wor^{a}hto** = Go. *waúrhta* 'made' and **-wol^{ʌ}fʀ** 'wolf'.

Beginning as early as ca. 750 the Elder Futhark was gradually replaced in Scandinavia by the Younger, of just 16 runes, even though the number of vowel phonemes expanded notably at about the time of its introduction.[2] In OE, on the other hand, the Elder Futhark was modified and added to, producing the Old English Futhorc (with **o** for earlier **a** due to the NSGmc. change of the rune-name *ansuz 'god' to *ōs*, §4.11), an alphabet of as many as 33 runes. Inscriptions in the Younger Futhark and in the OE Futhorc play a relatively minor role in tracing the histories of North Germanic and OE, though earlier Anglo-Frisian inscriptions in the Elder Futhark are of some linguistic significance: see, e.g. Bammesberger 1991a, H.F. Nielsen 1991, 1996, R.I. Page 1996.

The dating of inscriptions in Runic is hardly secure, involving epigraphic, archaeological, and linguistic considerations, and so disagreements in the relevant literature are inevitable. See, e.g., Krause 1971: 16–17, Antonsen 2002: 149–67. Much has been written about the disputed origins of runes: see, e.g., Antonsen 1982, Moltke 1985, Morris 1988, Odenstedt 1991, Vennemann 2013, Fairfax 2014, and for an overview of scholarship, Antonsen 2002: 93–117. For general studies and introductions to runology, see Düwel 1983, 1998, Antonsen 2002, Looijenga 2003, Askedal *et al.* 2010, M.P. Barnes 2012. For grammars of Runic, see Krause 1971 (with an abridged corpus of 127 inscriptions derived from the comprehensive corpus of Krause 1966), Antonsen 1975. On Runic as evidence for language history, see, e.g., Bammesberger 1994b, 1996, Grønvik 1998a, b, H.F. Nielsen 1998b, 2000, 2009, Spurkland 1998, Schulte 2000a, 2003, Antonsen 2002, Mees 2006, Stiles 2012.

Although early Runic is in some respects even more conservative than Gothic, it is too fragmentarily attested to furnish useful paradigms, and thus, in this book Runic evidence is adduced in connection with morphology only when strictly relevant.

1.   In his corpus of 121 inscriptions, ranging in date from ca. 150 CE to ca. 650, Antonsen (1975) finds a few with distinct diatopic linguistic features: 5 EGmc. or Go., 8 WGmc. or NSGmc., 15 NGmc., 5 East Norse, 1 West Norse; the remainder show no dialectal differentiation.

2.   On the Younger Futhark see, e.g., M.P. Barnes 2009, Schulte 2009, 2011.

1.14   North Germanic

The earliest runic inscriptions date to ca. 150 CE. At what point in time inscriptions begin to appear that can be identified as specifically North Germanic (as opposed to yet earlier inscriptions of a NWGmc. character) is a matter of debate (see §1.9), but it would appear that by the late fifth century at the latest some inscriptions may be identified as linguistically Proto-Norse (see H.F. Nielsen 2000).[1] Dialectal differentiation does not begin to appear in this Runic corpus until the Viking Age (ca. 800–ca. 1050), at which point East and West Norse may be distinguished, the former evincing minor but separate Swedish and Danish characteristics already during this period, the latter separate Norwegian and Icelandic characteristics beginning in the twelfth century.[2] Old Gutnish, spoken on the island of Gotland in the Baltic, differs in certain respects from East Norse, and also from West Norse, and it has been argued that it is most closely related to Gothic[3] (as the name of the island might imply), though it is normally accounted a dialect of Old Swedish. None of the few runic inscriptions from Iceland can be dated earlier than ca. 1200, and so they are of little linguistic use. The earliest Icelandic manuscript evidence is from the end of the twelfth century, but manuscript evidence does not become plentiful until the second half of the thirteenth.

The weightiest respects in which Old East Norse differs from Old West Norse are these (Noreen 1970: §8): (a) front and back umlaut frequently fail, e.g. OEN *vāre* 'were' (sj.), *ī gār* 'yesterday', *land* 'lands' (nom./acc.pl.) : OWN *væri*, *í gær*, *lǫnd*; (b) syllable-final OWN *ū* corresponds to OEN *ō*, e.g. OEN *kō* 'cow', *gnōa* 'rub' : OWN *kú*, *gnúa*; (c) *ī*, *ē*, *ȳ* fail to form rising diphthongs with a following vowel, e.g. OEN *sēa* 'see', *fīande* 'enemy', *bȳar* 'farmstead' (gen. sg.) : OWN *sjá*, *fjandi*, *bjár*; (d) the change of *mp*, *nk*, *nt* to *pp*, *kk*, *tt*, respectively, is far less regular, e.g. OEN *krumpin* 'stunted', *ænkia* 'widow', *bant* 'bound' (pret.) : OWN *kroppinn*, *ekkja*, *batt*; (e) the OEN endings nom. pl. *-iar*, *-iær*, acc. *-ia*, *-iæ* of masc. *i*- and *ja*-stems correspond to OWN nom. *-ir*, *-i*, e.g. OEN *drængiar*, *-ia* 'fellows' : OWN *drengir*, *-i*; (f) OEN suffixed def. art. dat. pl. *-umin* for OWN *-unum*; (g) some distinctive OEN pronouns, e.g. *iak*, *iæk* 'I', *vī(r)* 'we', *ī(r)* 'you' (pl.), rel. *sum* : OWN *ek*, *vér*, *(þ)ér*, *sem*; (h) weak forms corresponding to OWN preterites in *-r-* (class VII), e.g. OEN *sāþe* : OWN *sera* 'sowed'; (i) mediopassives in *-as(s)*, e.g. OEN *kallas(s)* : OWN *kallask* 'are called'.

Unless specified otherwise, in this book the term 'Runic' (thus capitalized) is used in connection with forms of a Proto-Norse character attested in runic inscriptions. The term 'Old Norse' is used in connection with forms in either runic or manuscript attestation that postdate the Proto-Norse period (i.e., appearing after ca. 800), and the term may be used indifferently in respect to East and West Norse forms. Most cited forms of the historical period are designated 'Old Icelandic' rather than 'Old Norse', reflecting their actual provenance.[4] OIcel. forms are cited in this book in standardized orthography of the

classical period (i.e. ca. 1200–ca. 1350) unless otherwise stated, e.g. with high vowels in unstressed syllables (-*u(m)*, -*i(r)* rather than earlier -*o(m)*, -*e(r)*); *ð* rather than *þ* except initially in free morphemes; and *á* for *ǫ́*.[5]

Noreen 1970 is a comprehensive grammar of Old West Norse; for Old Icelandic see also Heusler 1967, Gutenbrunner 1951, Wessén 1958. More concise are R. Iversen 1973, Ranke & Hofmann 1988, O.E. Haugen 2013a, b. For Old Swedish and Old Gutnish, see Noreen 1904; for Old Danish, Brøndum Nielsen 1950–7. For collective treatments of all the North Germanic languages, see Wessén 1968, Bandle *et al*. 2002–5. The most comprehensive and complete dictionary of Old Norse/Icelandic is Fritzner 1954. A new, comprehensive dictionary of prose (currently A-EM) is in preparation.[6] Other dictionaries: de Vries 1962 (etymological), Cleasby & Vigfusson 1957, and Zoëga 1910.

1.   The loss of final *-z* in **kaba** (for *kamba*) on the Frienstedt comb (ca. 250–300) is a specifically WGmc. development (see Schmidt, Nedoma, & Düwel 2011), but there is no need to assume that the change had affected all of WGmc. by the date of its deposit. Compare the mother-goddess names *Vatvims*, *Aflims*, and *Gabims* in Ubian inscriptions (dat. pl., 1st–3rd centuries; Much 1887, and cf. Ringe & Taylor 2014: 46). Other Runic evidence is more difficult to interpret, e.g. **alugod** (Værløse clasp, Zealand, ca. 200), of which the second constituent could reflect **ʒōðaz* (so Antonsen 1975: 75), though it could also be a voc. (so Krause 1971: 174).

2.   On the development of the Scandinavian languages out of Proto-Norse, see Bandle 1973, Bandle *et al*. 2002–5. Some of the earliest differences to arise between Old Norwegian and Old Icelandic, mostly strong tendencies rather than absolute differences, are the following (Noreen 1970: §9): (a) failure of back mutation in ONorw., e.g. dat. pl. *sakum* 'cases' (OIcel. *sǫkum*); (b) unstressed high vowels in ONorw., e.g. the inflections -*u(m)* and -*i(r)* (OIcel. -*o(m)* and -*e(r)* before ca. 1200); (c) loss of initial *h* before sonorant consonants in ONorw., e.g. *loupa* 'leap, run', *níga* 'sink', *ringr* 'ring' (OIcel. *hlaupa*, *hníga*, *hringr*); (d) change of *þn* to *mn*, e.g. ONorw. *svemn*, OIcel. *svefn* 'sleep'; (e) pronouns *mit* beside *vit* 'we' (dual), *mér* beside *vér* 'we' (pl.), *hvarr* beside *hværr* 'which, each' (OIcel. *vit*, *vér*, *hverr*); (f) 2 pl. verb ending -*r* beside -*ð*, -*t*, e.g. ONorw. *grípir*, -*ið*, -*it* 'grasp' (OIcel. *grípeð*, -*et* before ca. 1200) and ONorw. *gripur*, -*uð*, -*ut* 'grasped' (OIcel. *gripoð*, -*ot* before ca. 1200).

3.   So, e.g., Wessén 1968: 115–17. The chief source for Old Gutnish is *Guta saga* (13th cent.). Examples of distinctive Old Gutnish features are these: (a) The umlaut of PGmc. *au is *oy*, as in *droyma* 'dream' (OEN *drōma*, OWN *dreyma*); (b) PGmc. *ai remains unchanged, as in *þaim* 'them' (dat.; OEN *þēm*, OWN *þæim*); (c) as in OWN, PGmc. *au remains unchanged, as in *auga* 'eye' (OEN *ǿga*, OWN *auga*).

4.   The distinction between Old Norse and Old Icelandic is of especial importance in connection with English language history, since citing an Old Icelandic form as if it were an Old Norse form would inevitably lead to misrepresentations about Norse loanwords in English, e.g. PDE *though* < ON *þōh (OIcel. *þó*).

5.   The standardized spelling used here is thus that of most modern editions of OIcel. literary texts, e.g. those in the *Íslenzkt fornrit* series (1933–). For further features distinguishing the language of the classical period from the earlier period (ca. 870–ca. 1200), not all of them indicated in standardized orthography, see Noreen 1970: §10, using a slightly more archaic normalized orthography.

6.   *Ordbog over det norrøne prosasprog / A Dictionary of Old Norse Prose* (Copenhagen, 1986–), with unedited material available on-line: http://onp.ku.dk/english/ (last accessed 12 June 2017).

1.15   West Germanic

As noted above (§1.10), no scholarly consensus has been reached about the origin and the internal and external relations of the West Germanic languages. The ethnic groups identifiable as West Germanic that are mentioned in Greek and Roman sources tended to migrate considerable distances during the Migration Period (*die Völkerwanderung*, ca. 300–ca. 700), with the consequence that their original linguistic affinities may have been altered over time by alignment with the groups with which they came into contact.[1] An

example of this is the Lombards (Langobards), who established a kingdom in northern and central Italy in the sixth century. They are of uncertain affinities, formerly thought an East Germanic or a North Sea Germanic group, though the few attested words in Lombardic, preserved in inscriptions and in Latin sources, plainly evidence the effects of the High German Consonant Shift (§6.21; see van der Rhee 1976, Petracco Sicardi 1977, Torgilsvedt 2009). In the first century CE they were counted among the Suevi by Tacitus and Strabo, the latter of whom locates them astride the Elbe, whereas Paulus Diaconus says that they originated in Scandinavia. See further Hutterer 1975: 336–41, and for linguistic analysis and an overview of scholarship, Tischler 1989.[2]

Certainly Anglo-Frisian, comprising English and Frisian, is recognizable as a subgroup of WGmc., and its affinities to Old Saxon are sufficient to render the term North Sea Germanic (or Ingvaeonic) useful as a way of grouping Old Saxon with the Anglo-Frisian group, regardless of the precise historical circumstances that led to the sharing of features within this group.[3] For a list of distinctive NSGmc. features, see §1.10. The remaining WGmc. languages may be said to form two groups, distinguished by the extent to which they show the effects of the High German Consonant Shift (§6.21). The shift characterizes High German (*Hochdeutsch*) but not Low Franconian, of which Dutch (including Flemish) is now the chief variety. Naturally, the varieties of Low German (*Niederdeutsch* or *Plattdeutsch*) descended from Old Saxon, like other Ingvaeonic languages, remain unaffected by the High German Consonant Shift, but they share a number of features with Low Franconian that the other Ingvaeonic languages do not share.

1. In general, the movement of West Germanic peoples was to the south and west, occupying lands formerly held by Celts, as demonstrated by archaeological finds, the testimony of classical authors, and, especially, the Celtic origins of much of the hydronymy of southern and western Germany.

2. Further overviews of scholarship on Lombardic: Scardigli 1978, van der Rhee 1978, Restelli 1984.

3. On Anglo-Frisian as a possible protolanguage, see Pietersen 1978, H.F. Nielsen 1985, 1994a, 1998a, Bremmer 1982, 2008, Stiles 1995, Fulk 1998a, Kortlandt 2008, Repanšek 2012, Versloot 2014. On the position of OS within Gmc., see Dal 1983, H.F. Nielsen 1994b, Krogh 1996.

1.16   Old English

Bede (d. 735) asserts that beginning in the middle of the fifth century Britain was invaded by Angles, Saxons, and Jutes. Archaeological evidence largely confirms the identification, though other ethnic groups must also have been involved (as Bede himself seems to say elsewhere), and the invasion no doubt began early in the fifth century rather than the middle (see J. Campbell 1982). And so Bede probably had reliable sources about the ethnicities of the invaders, and he was not simply extrapolating from the political situation of his own day, when the English north of the Thames were called *Engle* and spoke dialects different from those south of the Thames (and in Middlesex and Essex), where the *Seaxan* lived; and the Germanic peoples of Kent and the Isle of Wight, said to have been settled by Jutes, maintained a separate identity. The preserved dialects of Old English are West Saxon, Kentish, Mercian, and Northumbrian, the last two of which are particularly closely related and are referred to collectively as Anglian. The earliest texts

in English are runic inscriptions, attested beginning in the fifth century; the earliest manu-scripts are from ca. 700, though some texts (such as the laws of Æthelberht of Kent) must have been composed earlier, despite being preserved only in late copies. Old English continued to be copied with some fidelity in certain areas as late as the thirteenth century, though most texts of the twelfth century are commonly regarded as Middle English, a language characterized by the reduced vocalism of inflections, the influx of vocabulary from Old Norse and French, and extensive changes to the system of vowels.

West Saxon is attested in Early and Late varieties.[1] The former is attested fragmen-tarily in charters, the earliest of which to show distinctive WS features dates to the middle of the ninth century, but the chief witnesses originated in the reign of King Alfred 'the Great' (r. 871–99), whose program of translating Latin texts into English was intended to reinstill the literacy that had become scarce as a consequence of Scandinavian incursions into Britain. Another consequence of those invasions was the eventual unification of the English under the rule of a single, West Saxon king, with the result that Late West Saxon (beginning about 950) became the standard literary language for all of England, with the vast majority of the OE corpus preserved in that dialect. Late West Saxon is preserved in two sorts: (a) a managed variety (Standard Late West Saxon, or Ælfrician West Saxon, on which see, e.g., Gretsch 2006) promulgated by Æthelwold, bishop of Winchester from 963 to 984, and his student Ælfric, with fairly uniform spelling practices and some distinctive vocabulary, and (b) a variety showing an admixture of phonological and lexical features characteristic of other dialects, probably due to the imperfect 'translation' of texts from other dialects (chiefly Mercian) into West Saxon (on which see Fulk 2009a, with references).

The most substantial sources of information on the other OE dialects are glosses. Kentish is fragmentarily attested, almost exclusively in glosses and charters. Evidence for Mercian (of the Central and West Midlands) is much more substantial, including collected glossses of ca. 700 and continuous glosses on the Vespasian Psalter (of the first half of the ninth century, though the language seems rather more archaic) and a large portion of the Rushworth Gospels (of the late tenth century). Northumbrian (the dialect of the North), for which no charters survive, is attested in a small amount of eighth- and (probably) ninth-century poetry, and in the form of names in a confraternity book begun in the ninth century; the only texts of any length are continuous glosses of the late tenth century, by which time the inflectional morphology of the dialect has lost countless earlier distinctions. For a summary of the chief characteristics of the non-Saxon dialects, with exemplary texts, see Fulk 2014: 118–31.

OE f, s, $þ$, $ð$ (the last two used indifferently in regard to phonetic value) are voiced between voiced sounds, otherwise voiceless, the variants being allophonic. According to environment, c, g, sc, cg are palatal or velar: although there is some disagreement (see Minkova 2003, with references), it is most commonly held that c represents [k] when not palatalized and affricated to [ʧ]; g when not palatalized represents [g] initially and after n, but [ʤ] after n when palatalized, [j] elsewhere when palatalized, and [ɣ] in all other environments;[2] sc represents [ʃ] everywhere except internally before or finally after a back vowel, where it is [sk]; and cg is usually the palatal affricate [ʤ], rarely the velar geminate [gː].[3] OE h is [h] initially, otherwise [x].[4] There is much disagreement about the values

of the diphthongal digraphs *ĕa*, *ĕo*, *ĭo*, *ĭe*: see Hogg 1992: §§2.19–37 for discussion and references, and see §4.8 *infra*.

Some important resources for the study of OE phonology and morphology may be mentioned. The most useful grammars are Bülbring 1902, Sievers 1903, Luick 1914–40 (phonology), Wright & Wright 1925, Girvan 1931, Brunner 1965, A. Campbell 1977, Hogg 1992 (phonology), and Hogg & Fulk 2011 (morphology). On the development of OE out of PGmc., see also Lass 1994, Ringe & Taylor 2014. The largest dictionary is Bosworth & Toller 1882, supplemented by Toller 1921 and A. Campbell 1972, though in some respects more useful is Clark Hall 1960. The *Dictionary of Old English* (currently A–H: Cameron *et al.* 2016) is largely unconcerned with historical matters, but its database is invaluable, especially in the on-line version, with global search capacity: Healey 2009.

Unless specified otherwise, OE forms cited in this book are EWS, for reasons explained in Fulk 2009b.

1. Here the practice is followed of capitalizing 'Late' and 'Early' in connection with West Saxon in acknowledgment that the later variety it is not precisely a lineal descendant of the earlier (so, e.g., Hogg 1992), for reasons explained succinctly in A. Campbell 1977: §301.

2. But final *g* after any sound but a nasal is an analogical spelling, the actual value being [x], e.g. *burg* beside *burh* 'fortress'.

3. For an account of the various palatalizing environments, which are not uniform for all these sounds (and some of the details of which are in dispute), see Hogg 1992: §§7.15–43, with references.

4. Possibly *hl*, *hr*, *hn*, *hw* represent voiceless sonorants, though etymologically they are clusters, and in poetry they alliterate with *h* and with one another.

1.17   Old Frisian

At one time the Frisians dominated the North Sea coast from the area of Bruges to the border of present-day Denmark, though today their language is spoken in just three districts within that area, Friesland in the Netherlands, Saterland in Germany (south of Ostfriesland, Niedersachsen), and the districts of Nordfriesland and the (main) island of Heligoland (NHG *Helgoland*), also in Germany (on the west coast of Schleswig-Holstein). The earliest Frisian preserved takes the form of some twenty brief runic inscriptions of the period ca. 500–ca. 800 CE, along with a few words in Latin texts. Aside from glosses in a fragmentary psalter of ca. 1200, and a few more recently discovered words from the 12th cent. (see Langbroek 2015), the earliest manuscripts containing Old Frisian date to about 1300, the latest to about 1600, almost exclusively in the form of legal texts. Old Frisian thus is coeval with the middle or early modern periods of other WGmc. languages, though its inflectional morphology in particular has more in common with the older periods of those languages. It is a useful witness to the early history of West Germanic, though not generally as useful as OE, OS, and OHG. It is, accordingly, cited less frequently in this book than those languages, usually only when it provides information not afforded by those. A distinction may be drawn between two dialects, Old East Frisian and Old West Frisian, from regions separated by the Lauwers, but the difference is also chronological, the former being attested almost exclusively in manuscripts of the period ca. 1275–ca. 1475, the latter of the period ca. 1475–ca. 1600.

Forms cited in this book derive from the former, unless marked otherwise. On the remains of Old North Frisian, see Steller 1928: 3.

Grammars of Old Frisian include van Helten 1890 (Old East Frisian), Steller 1928, and Bremmer 2009; Siebs 1901, Markey 1981, and Munske *et al.* 2001 cover the entire history of the language. For a dictionary of Old Frisian, see Köbler 2014a; the etymological dictionary of Boutkan & Siebenga (2005), based on the first Rüstring manuscript of ca. 1300 (of which Boutkan 1996 is a grammar), is useful; there is also a concise dictionary: Holthausen 1985.

1.18   Old Saxon

The Continental Saxons occupied Saxonia (Old Saxony), an area of northwest Germany bounded roughly by the Elbe and the Ems to the east and west, more or less equivalent to the modern states of Lower Saxony, Westphalia, and Saxony-Anhalt, i.e. with a southern border extending approximately on a line from Merseburg west to Essen. The earliest texts are two ninth-century poems, *Heliand* and the fragmentary *Genesis* (ed. Behagel 1984); there are also some less substantial prose texts and glosses preserved (ed. Wadstein 1899), along with words in Latin charters. From ca. 1100 the language is called Middle Low German and is characterized by the reduction of unstressed vowels to [ə]. Distinct dialects cannot be established for OS, the way they can for OHG, and in fact the extant records show a remarkable mixture of forms and variant spellings, often within a single text, perhaps some of it due to dialect mixture (resulting from the recopying of texts by scribes of different habits and linguistic backgrounds) and to the influence of Old Frisian, Old English, and Old High German sources and scribes. The language of the two poems differs from that of the prose texts in certain respects, the most salient of which is that the dat. sg. pronominal/adjectival ending in masc. and neuter forms is commonly *-(u)m*, *-on*, as in *im* 'him' and *hēlagon* 'holy', beside *imu*, *hēlagumu*, the latter being the usual forms in prose. Intervocalic *h* is also much better preserved in the early verse texts. The relations between orthography and sounds are similar to those of OE, though there are no affricates in native words, and there is greater variability of spelling, especially of diphthongs and unstressed vowels.[1] Unlike in OE, final stops are probably voiceless.

The most useful grammars and studies of Old Saxon are Gallée 1993, Holthausen 1921, Cordes 1973, Cathey 2000, and Schuhmann 2014.[2] For a highly innovative learner's grammar, see Rauch 1992. For lexicons, see Tiefenbach 2010, Köbler 2014d, and Sehrt 1925 (the last solely for poetry). For bibliography, see Gallée 1993: 349–404. See further Cordes & Möhn 1983.

1.   Variability in the representation of unstressed vowels was explained by Twaddell (1963) as due to a mismatch between the five vowels of the Latin alphabet and a four-vowel inventory in OS unstressed syllables, /i, u, æ, å/. This analysis was subsequently refined, especially by Klein (1977).

2.   Also to be noted is Donhauser *et al.* 2011, a database of Old Saxon, Old High German, and Old Low Franconian offering extensive morphological and syntactic annotation that can be searched to provide answers to many of the questions for which grammars are regularly consulted.

1.19   Old Low Franconian

This is the ancestor of the Limburgic dialect of Dutch. The only witness to the language is a now-lost interlinear gloss on the Psalter, preserved fragmentarily and often unreliably in several transcripts made ca. 1600, probably representing a southeastern dialect of the language, but with an admixture of Central Franconian forms. The Middle Dutch period begins ca. 1100. Because Old Low Franconian is preserved so fragmentarily and imperfectly, its evidential value for the development of West Germanic is severely limited.

   For text and grammar, see Cowan 1957 and Kyes 1969; on Donhauser *et al*. 2011, see §1.18 n. 2. For dictionaries, see Kyes 1983, Schutz 2007–14, and Köbler 2014c the last two on line. Robinson 1992: 199–221 offers an informative overview. Donaldson 1983 covers the entire history of Dutch. See further Bremmer & Quak 1992, Quak & van der Horst 2002; also J. Smith 1976, van Bree 1977, Quak 1981, Mees 2002, de Vaan 2014.

1.20   Old High German

High German represents those varieties of German regularly affected to some degree by the High German Consonant Shift (§6.21). OHG, roughly 750–1050, is generally divided into two dialect groups, Franconian (*Fränkisch*) or, less commonly, Central German (*Mitteldeutsch*, comprising East Franconian and West Central German, the latter including Rhine Franconian and Middle Franconian, the latter ill attested in the OHG period) and Upper German (*Oberdeutsch*, including Bavarian and Alemannic, the latter now comprising Swabian and High and Low Alemannic). It is only after the OHG period that East Franconian comes to be regarded as belonging to the Upper German group, at which point the term 'Franconian' is no longer synonymous with 'Central German'. It is also after the OHG period that the Thuringian and Upper Saxon areas of East Central German were colonized by Germanic speakers. The distinction between Central and Upper German is drawn on the basis of the extent to which they are affected by the High German Shift: Central German is bounded on the north by the Benrath line and on the south by the Speyer line (on which see §6.21), though it should be recognized that these lines are drawn on the basis of modern dialects and give only a rough impression of OHG dialect areas, East Franconian being particularly ill classified on this basis. In OHG times the dialects are represented by the usage in scriptoria of religious houses in the respective areas: Würzburg, Bamberg, and Fulda for East Franconian; Mainz, Lorsch, Speyer, and Frankfurt for Rhine Franconian, along with Weissenburg, which represents the South Rhine Franconian dialect; Trier, Echternach, Cologne, and Aachen for Middle Franconian; Regensburg, Freising, Tegernsee, Salzburg, Mondsee, and Passau for Bavarian; and St. Gall, Reichenau, and Murbach for Alemannic.[1]

   Aside from a few terms, such as names in Latin texts and words in runic inscriptions,[2] the earliest evidence for OHG dates to the second half of the eighth century and comprises chiefly glosses. The most important of the eighth-century texts are the *Wessobrunn Prayer* (ca. 770–90, Bavarian), the *St. Gall Vocabulary* (ca. 790, Alemannic), the *Abrogans*, a manuscript of *glossae collectae* beginning with Lat. *abrogans :*

dheomodi 'humble' (ca. 790 in the St. Gall manuscript, with other manuscripts from the early ninth century, Bavarian), and the *Isidor*, a translation of Isidore of Seville's *Tractatus de fide catholica contra Judaeos* (ca. 790–800, somewhere west of Cologne, hence Middle Franconian). Important ninth-century texts include an interlinear translation of the Benedictine Rule (ca. 800, Alemannic), *Muspilli*, a fragmentary poem about the end of times (ca. 800, Bavarian), the *Mon(d)see-Vienna Fragments* of a homiliary (ca. 825, Bavarian), the *Murbach Hymns* (ca. 825, Reichenau, hence Alemannic), the anonymous translation of Tatian's harmony of the gospels (ca. 825, Fulda, hence East Franconian), and Otfrid's *Evangelienbuch* (ca. 863–71, South Rhine Franconian, but ca. 900 in the Freising manuscript, a Bavarian recension). Also important are the translations of Notker Labeo (Boethius, Aristotle, Psalms, ca. 1000: Alemannic). *Isidor* and Notker are particularly important for the study of OHG vocalism, since they indicate vowel length, the former by doubling, the latter with a circumflex. Length is indicated less regularly by doubling in the Benedictine Rule, and occasionally (mainly in stressed syllables) by doubling or diacritics in some other texts: see Gabriel 1969 for a thorough survey of the Upper German sources.

The most salient differentiating characteristic of OHG is its consonant system, altered by the High German Consonant Shift (§6.21), which resulted in new affricates and a new geminate fricative *zz*, on the value of which see §6.21 n. 1. But it is also characterized by some unusual morphological characteristics, some of them innovative, such as the regularization of weak verb stems, some conservative, such as its retention of separate plural inflections for all three persons in verbs, the only WGmc. language to retain this feature.

The most useful resources on OHG phonology and morphology are Baesecke 1918, Schatz 1927, and Braune 2004a; on Donhauser *et al*. 2011, see §1.18 n. 2. For grammars of individual dialects, see Franck 1971 (Franconian) and Schatz 1907 (Bavarian). A general introduction to OHG and MHG is Russ 1978; other histories of the language include Scherer 1995 [1868], Waterman 1976, Wells 1987, Polenz 2009, Sanders 2010, Salmons 2012. Dictionaries: Schützeichel 2006, Köbler 2014b.[3] Two comprehensive dictionaries are in preparation: see Karg-Gasterstädt *et al*. 1968– and Lloyd *et al*. 1988–. Still useful is Graff 1840. For an assessment of the state of scholarship, see Davis 1999.

1.   On OHG dialects, along with the grammars cited below, and the references given there, see Moriciniec 1984.

2.   Worthy of mention in this regard is the inscription in runes on the Pforzen buckle (6th cent.), representing a full line of OHG verse.

3.   There is another on-line lexicon at http://awb.saw-leipzig.de/cgi/WBNetz/wbgui_py?sigle=AWB (last accessed 21 March 2018).

PHONOLOGY